

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

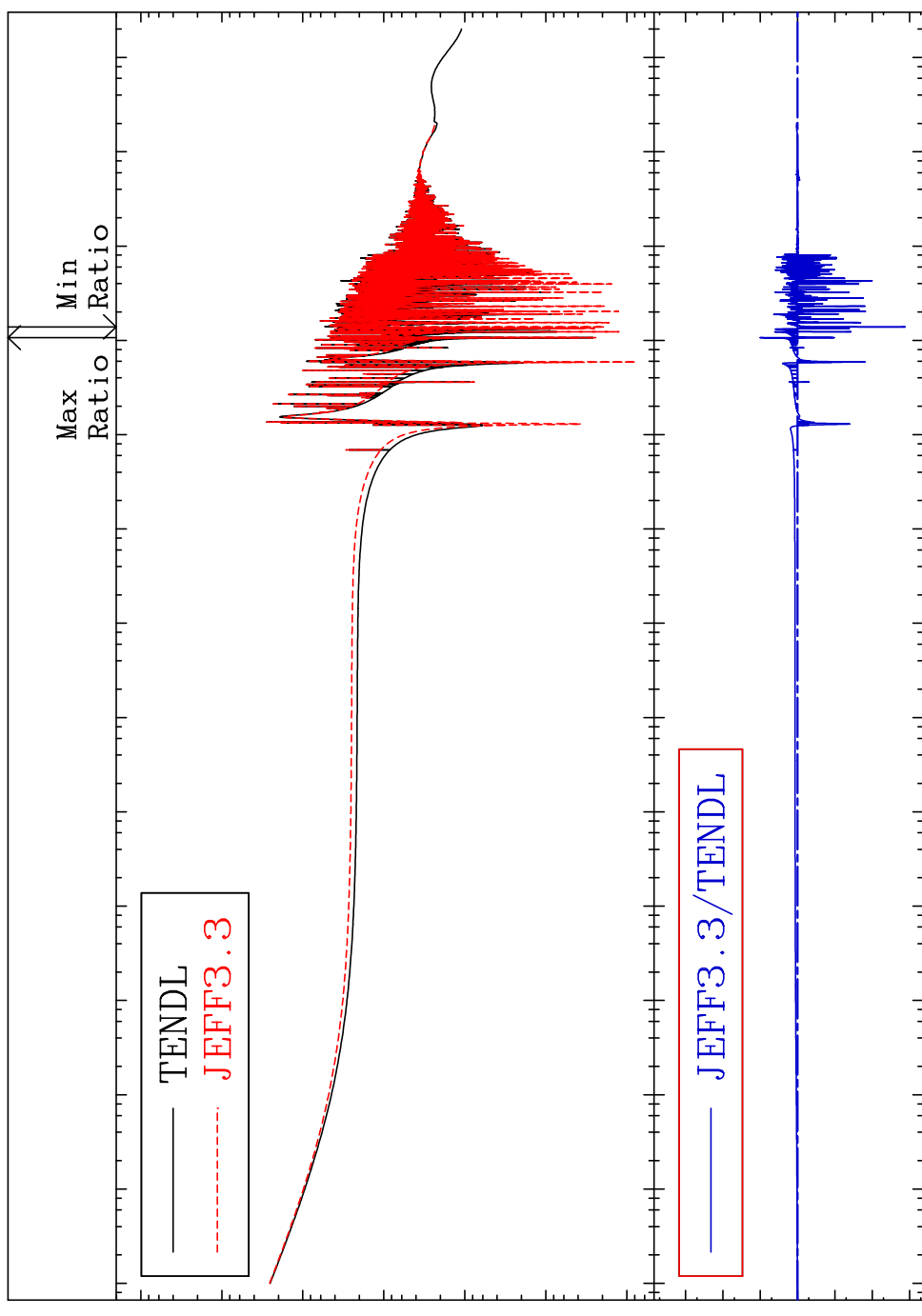
MAT 2825

Total

28-Ni-58

Cross Section

-99.87 To 906.9 %



1

Incident Energy (eV)

28-Ni-58

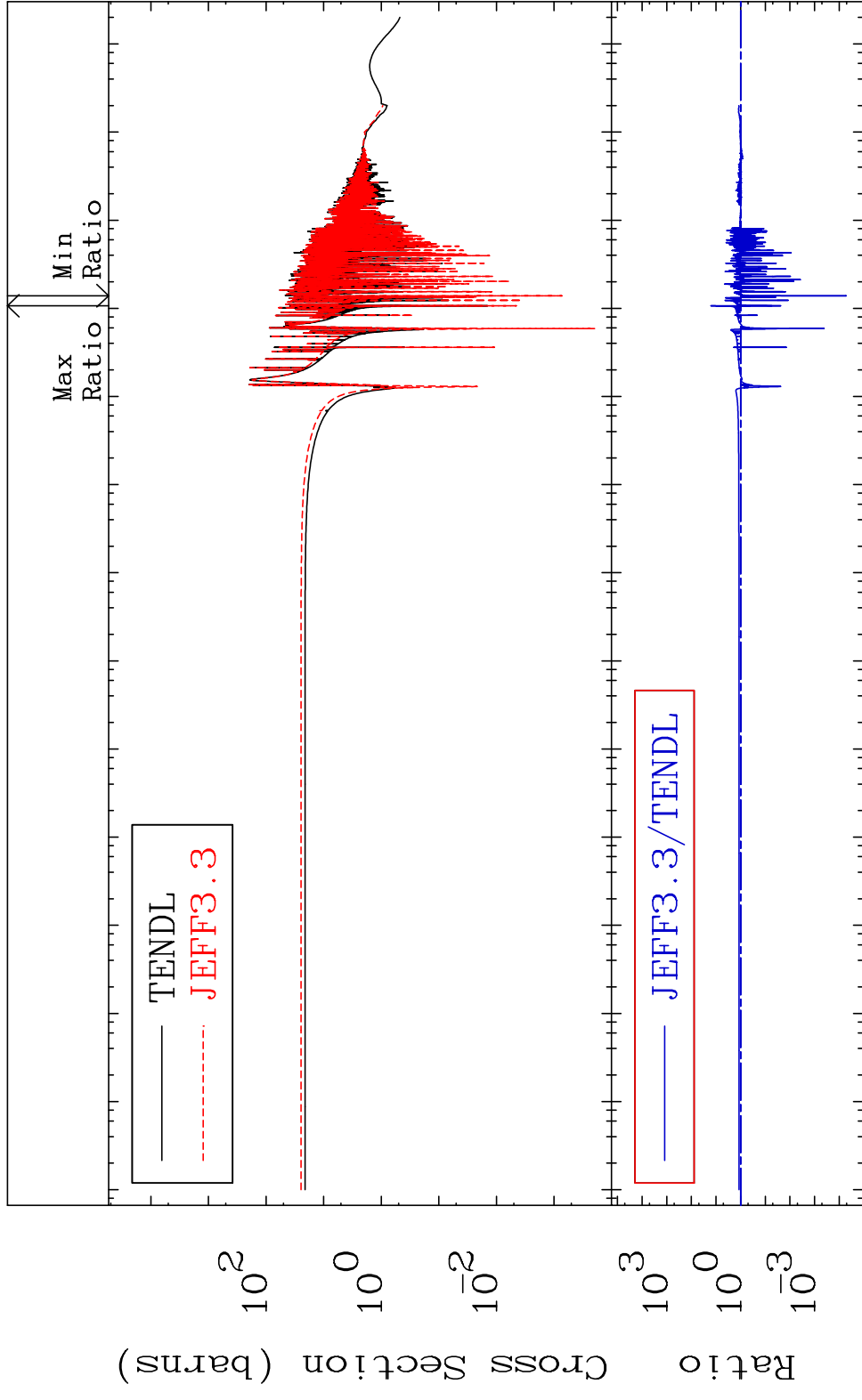
MAT 2825

Elastic

28-Ni-58

Cross Section

-99.99 To 1540. %



Ratio

10²

10⁰

10⁻²

10³

10⁰

10⁻³

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

2

Incident Energy (eV)

28-Ni-58

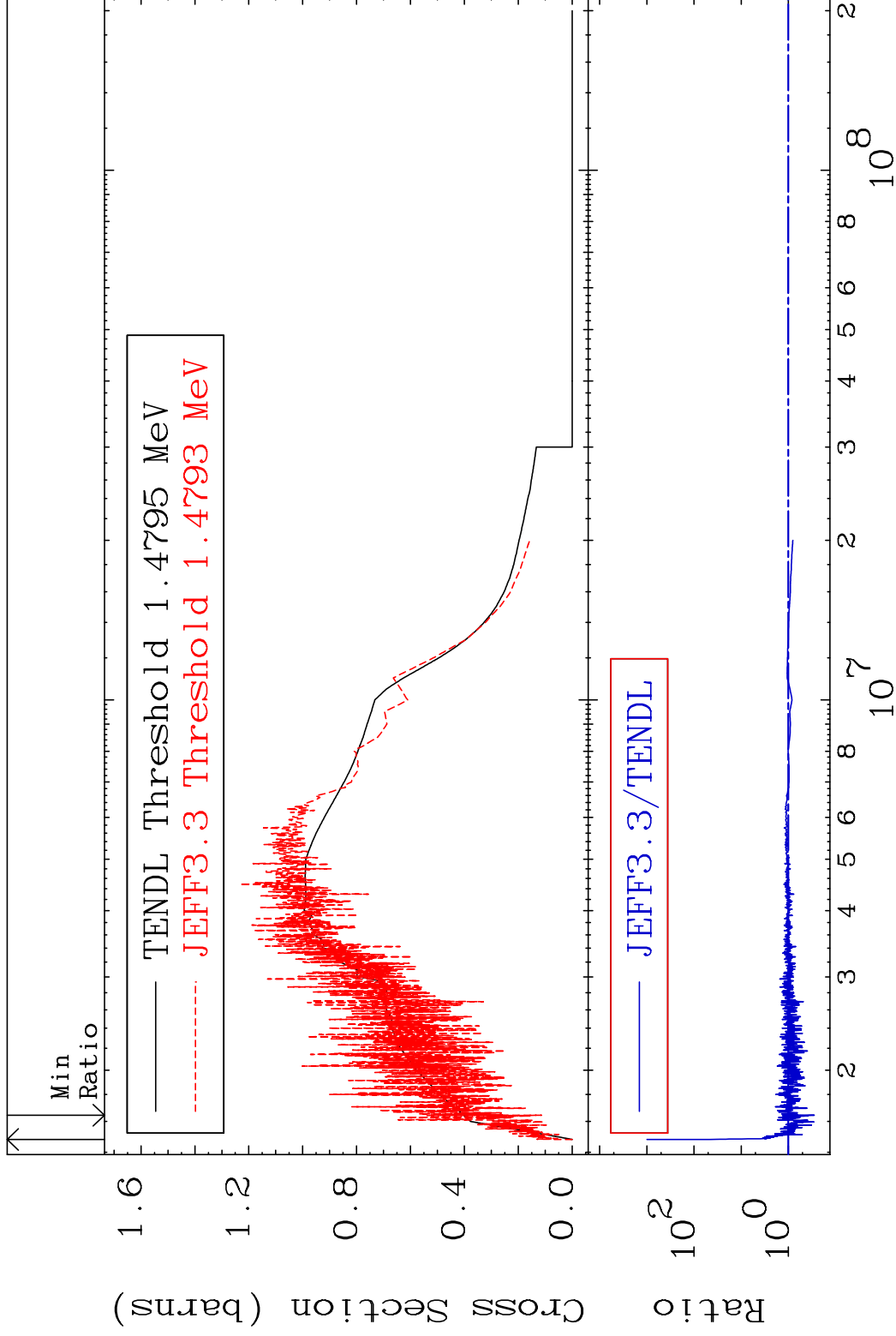
MAT 2825

Inelastic

²⁸Ni-58

Cross Section

-71.57 To 9999. %

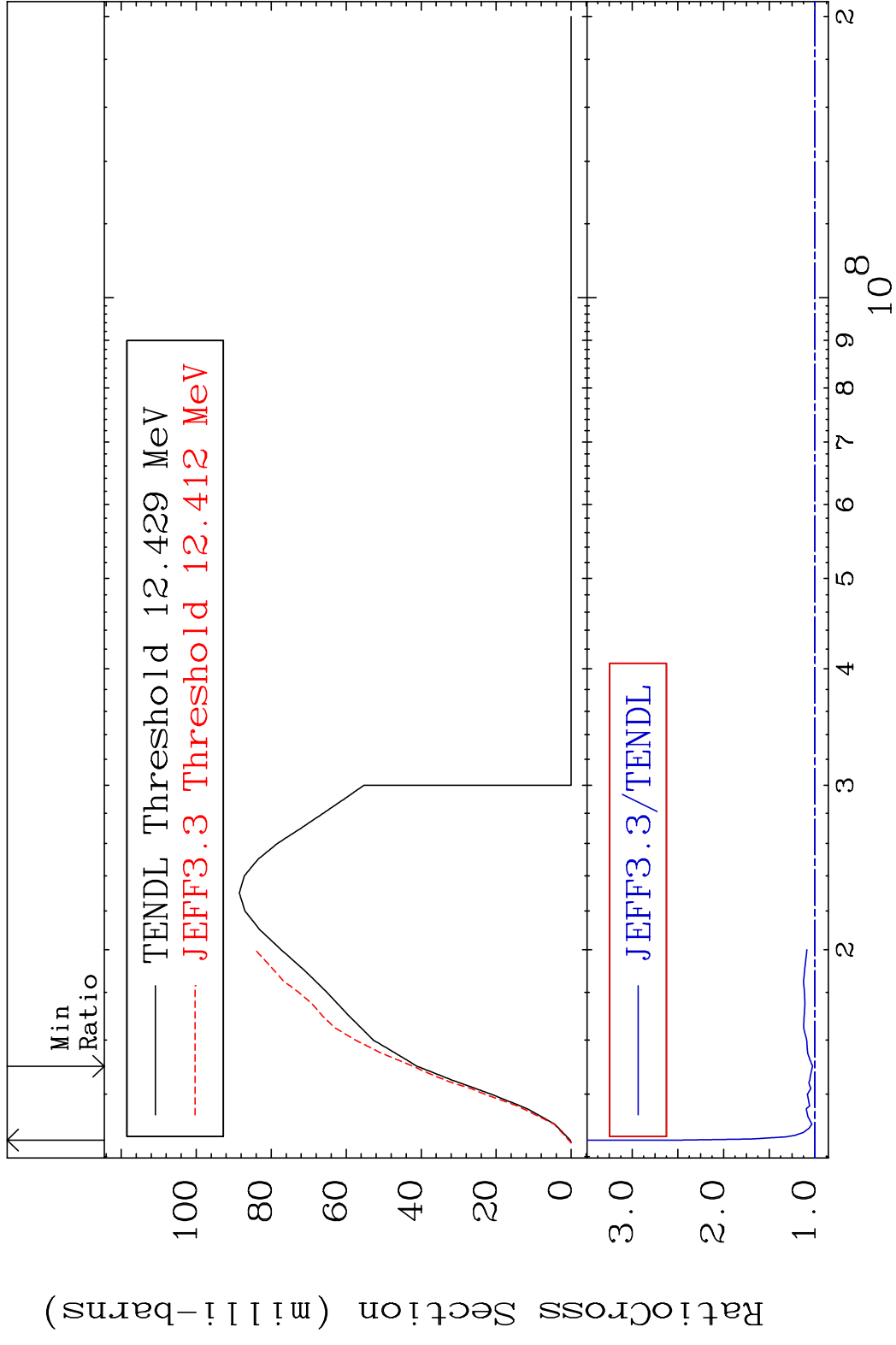


3

Incident Energy (eV)

²⁸Ni-58

MAT 2825 (n,2n) 28-Ni-58
 Cross Section 2.650 To 145.1 %



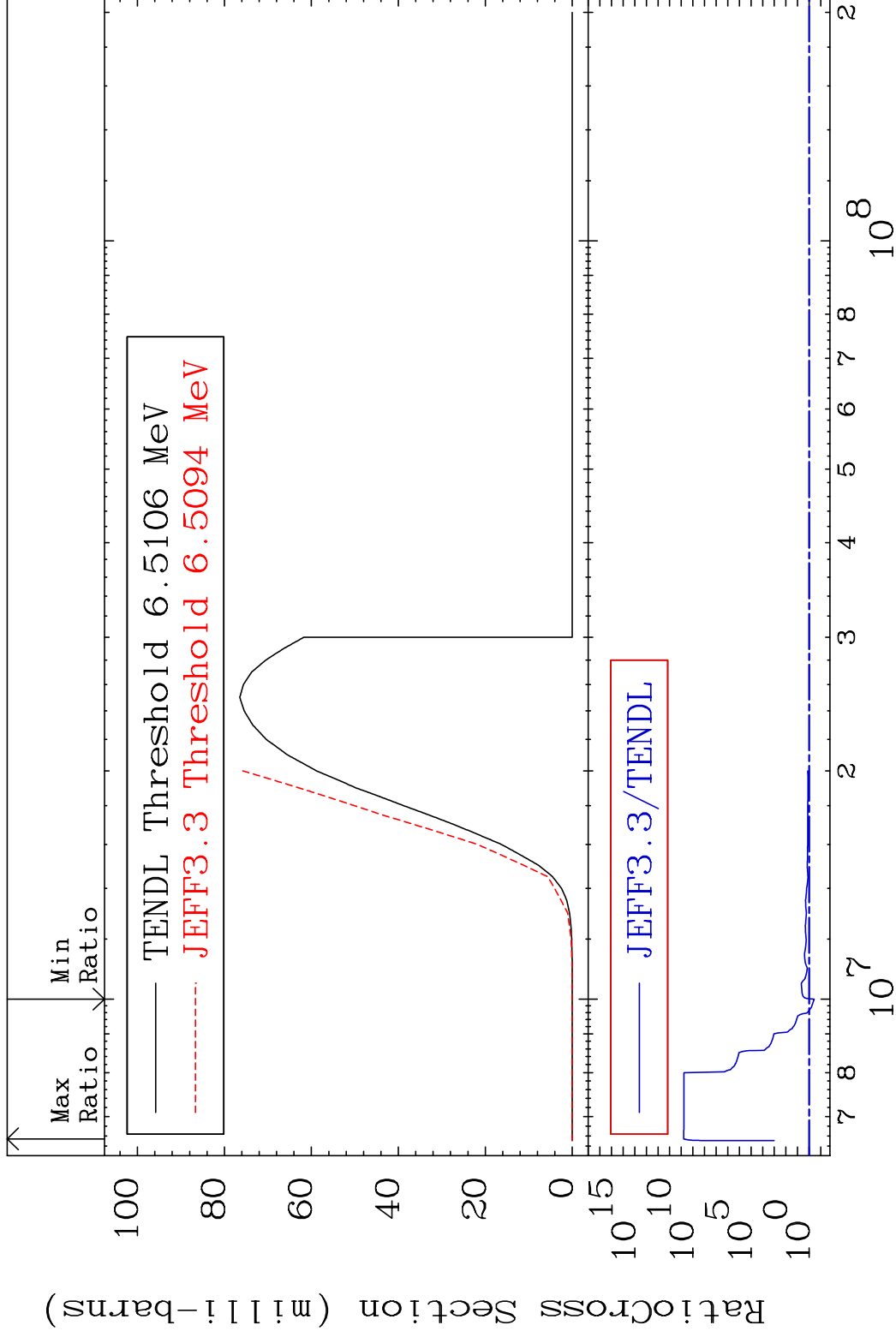
4 Incident Energy (eV) 28-Ni-58

MAT 2825

(n, n') α

28-Ni-58

Cross Section -62.62 To 9999. %



5

Incident Energy (eV)

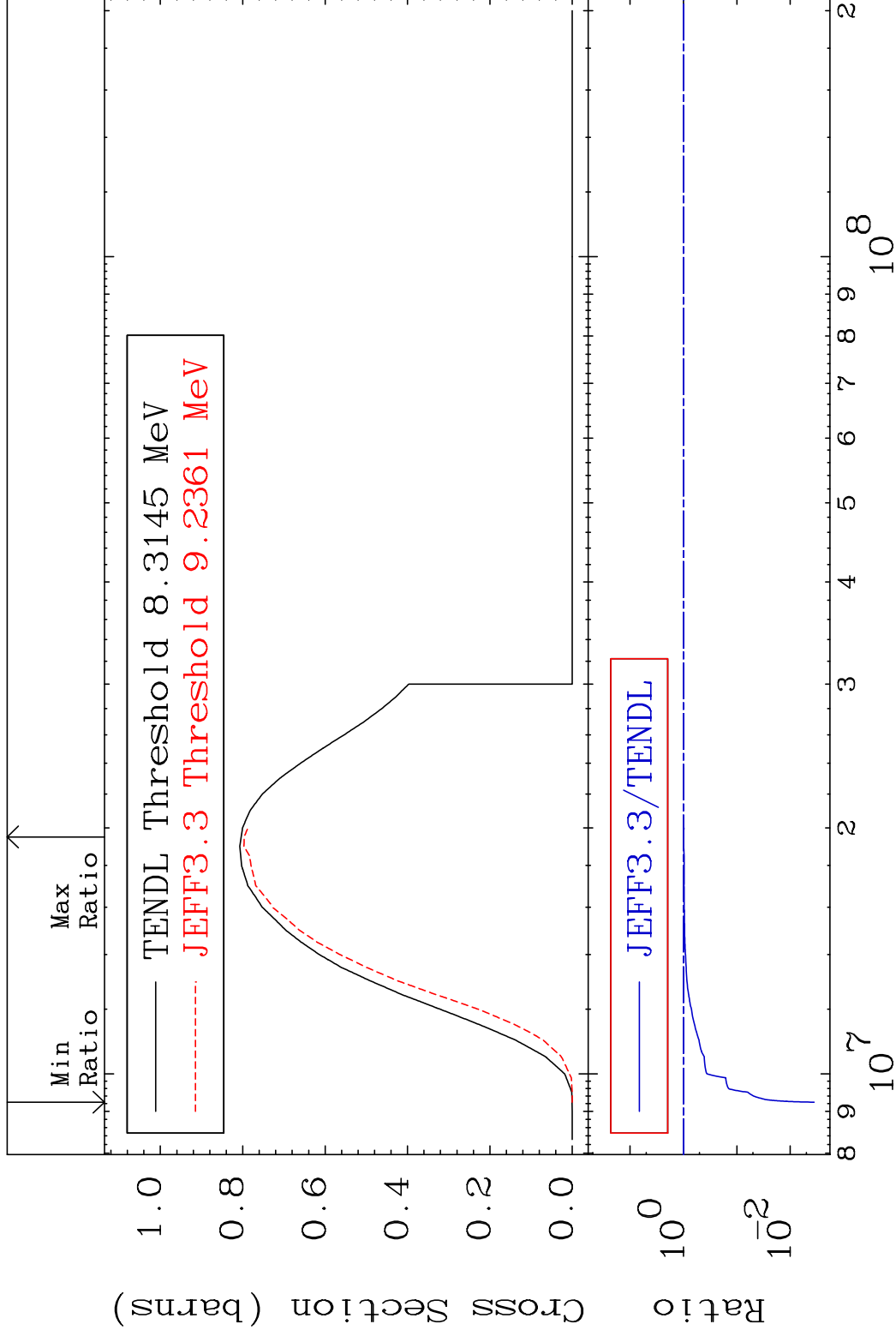
28-Ni-58

MAT 2825

(n, n') p

28-Ni-58

Cross Section -99.64 To -0.898%

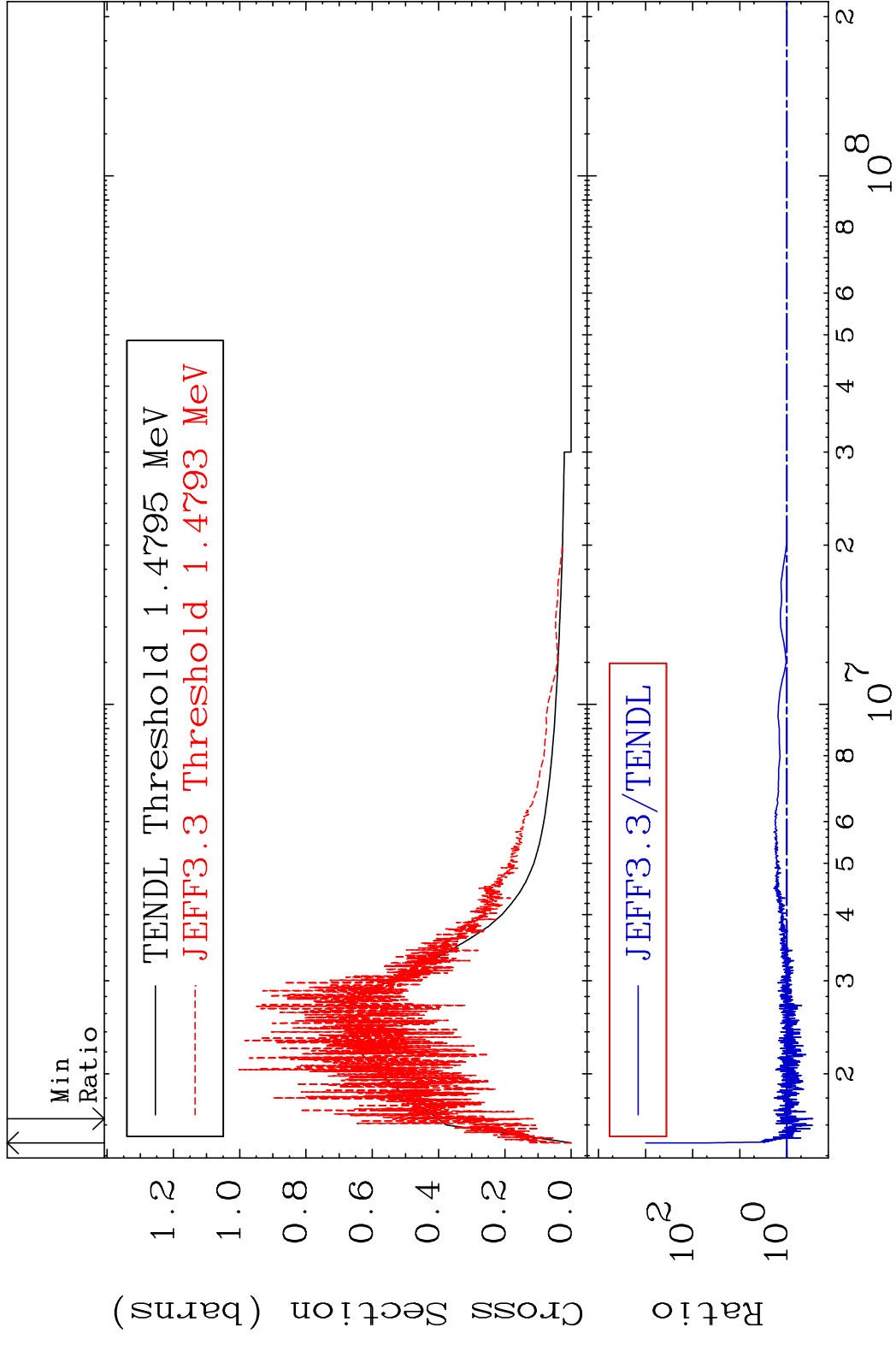


6

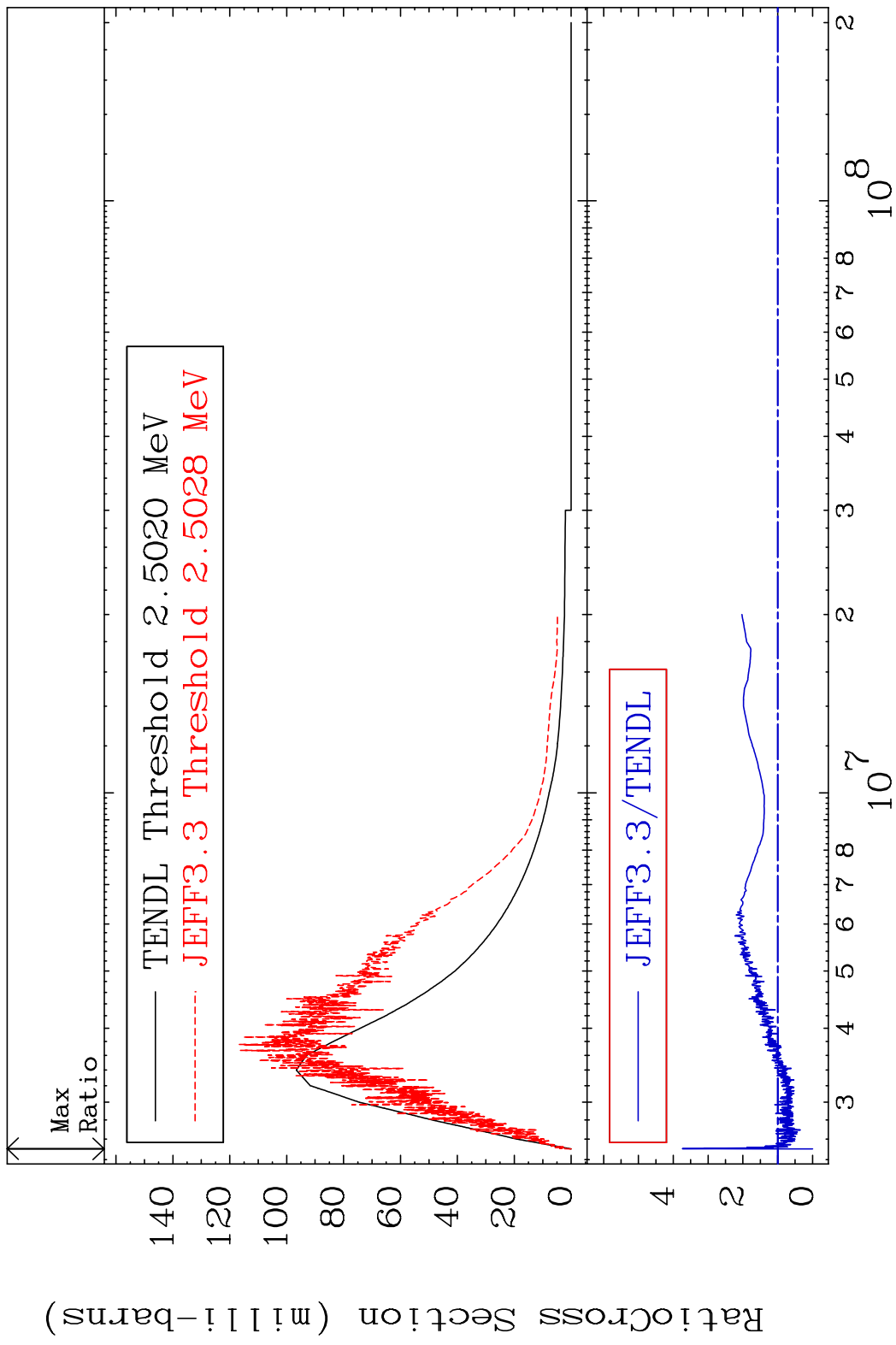
Incident Energy (eV)

28-Ni-58

MAT 2825 MT= 51 (n,n') Level 28-Ni-58
 Cross Section -71.57 To 9999. %

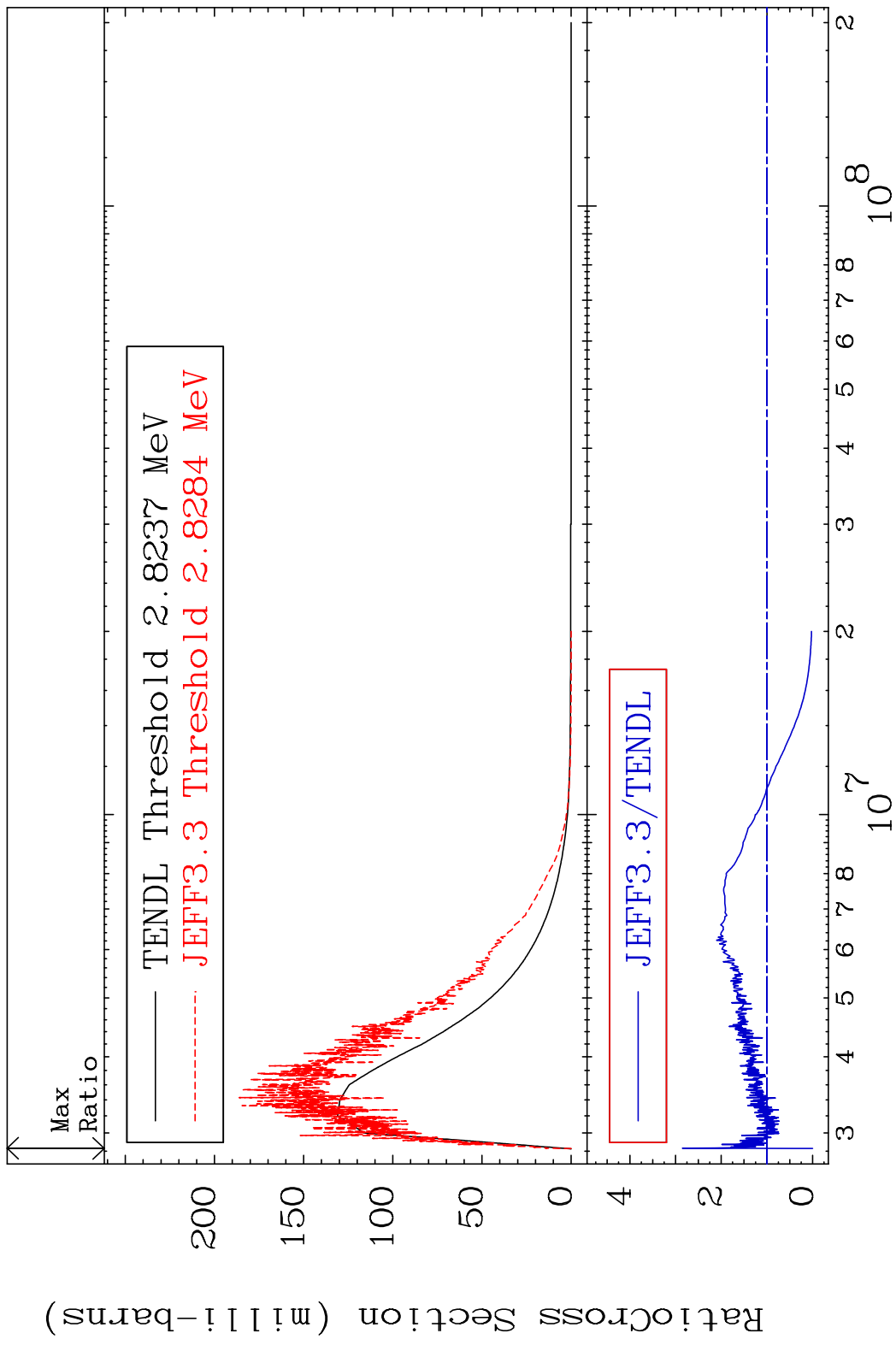


MAT 2825 MT= 52 (n, n') Level 28-Ni-58
 Cross Section -100.0 To 273.9 %

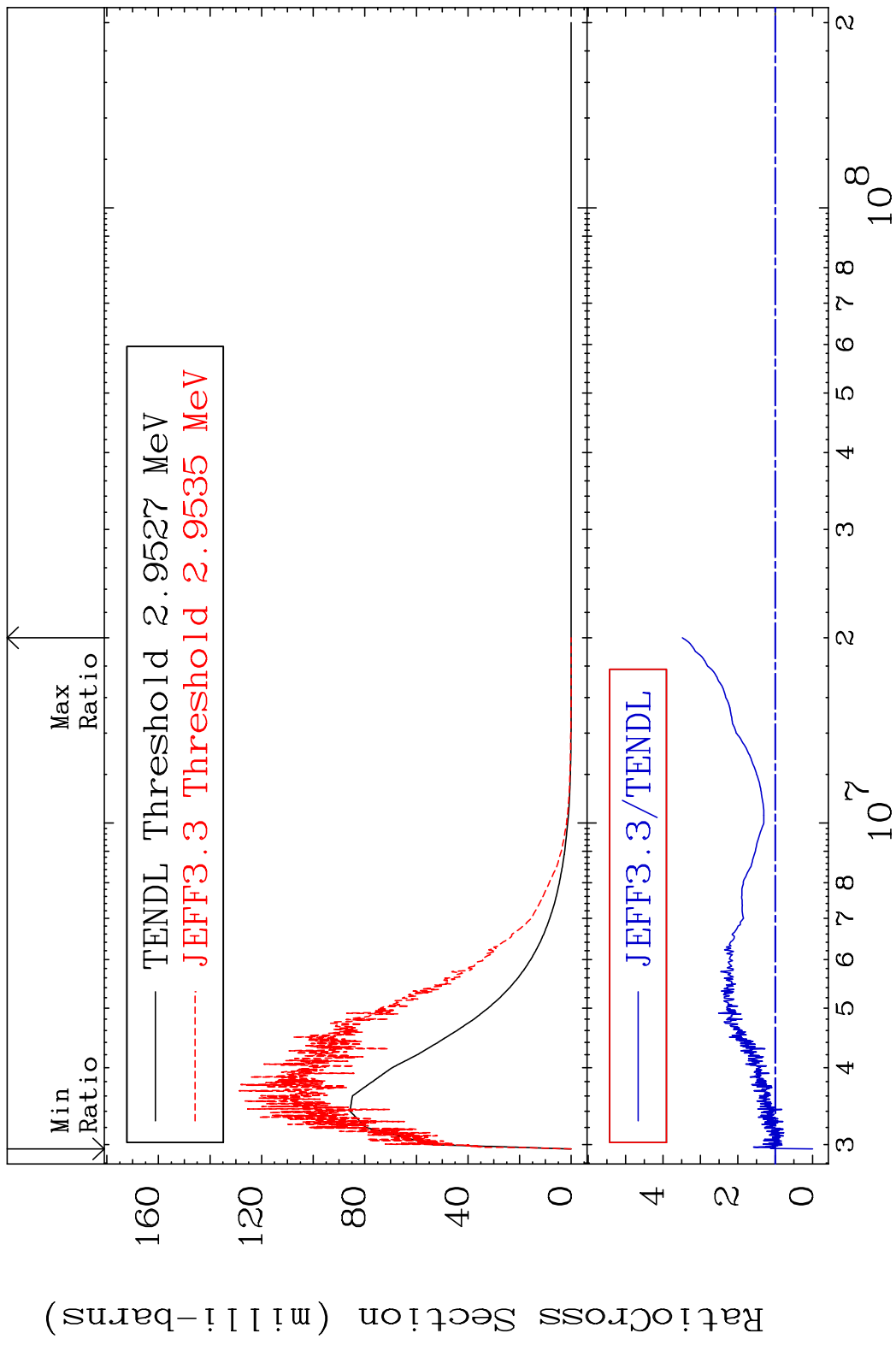


8 Incident Energy (eV) 28-Ni-58

MAT 2825 MT= 53 (n, n') Level 28-Ni-58
 Cross Section -100.0 To 185.2 %

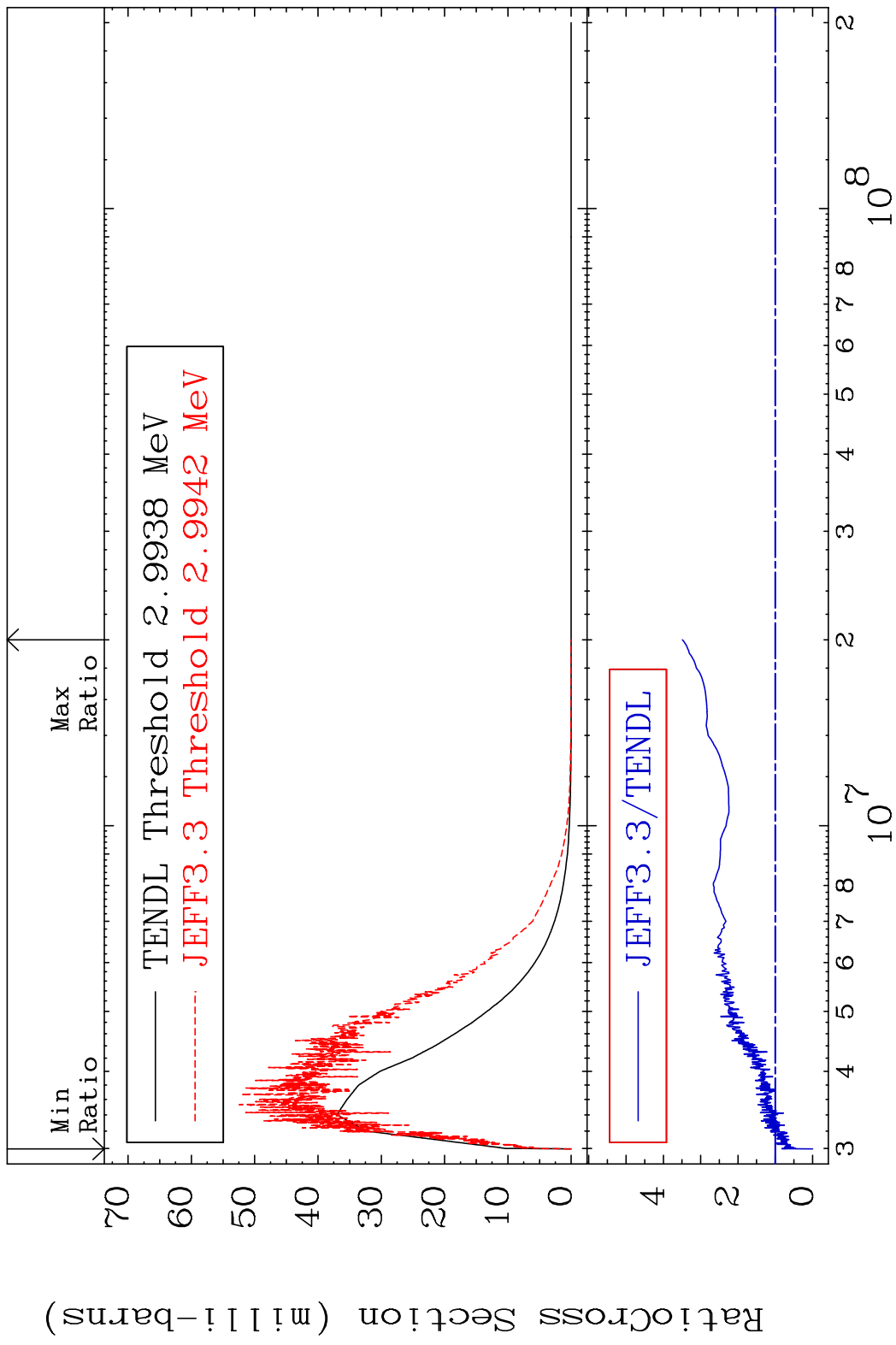


MAT 2825 MT= 54 (n, n') Level 28-Ni-58
 Cross Section -100.0 To 248.2 %

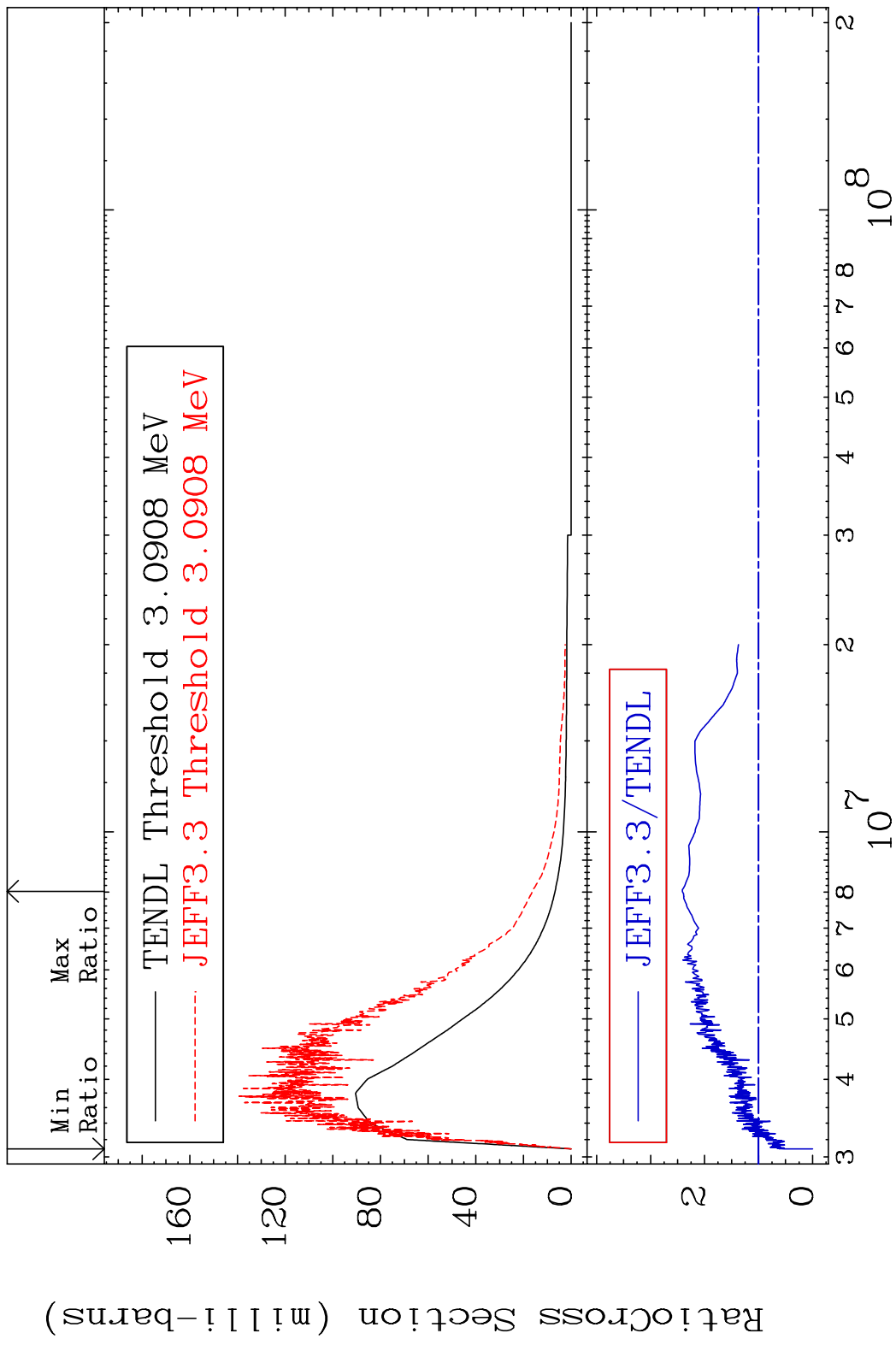


10 100 1000 10000 100000 1000000 10000000 100000000 1000000000 28-Ni-58

MAT 2825 MT= 55 (n, n') Level 28-Ni-58
 Cross Section -100.0 To 249.1 %

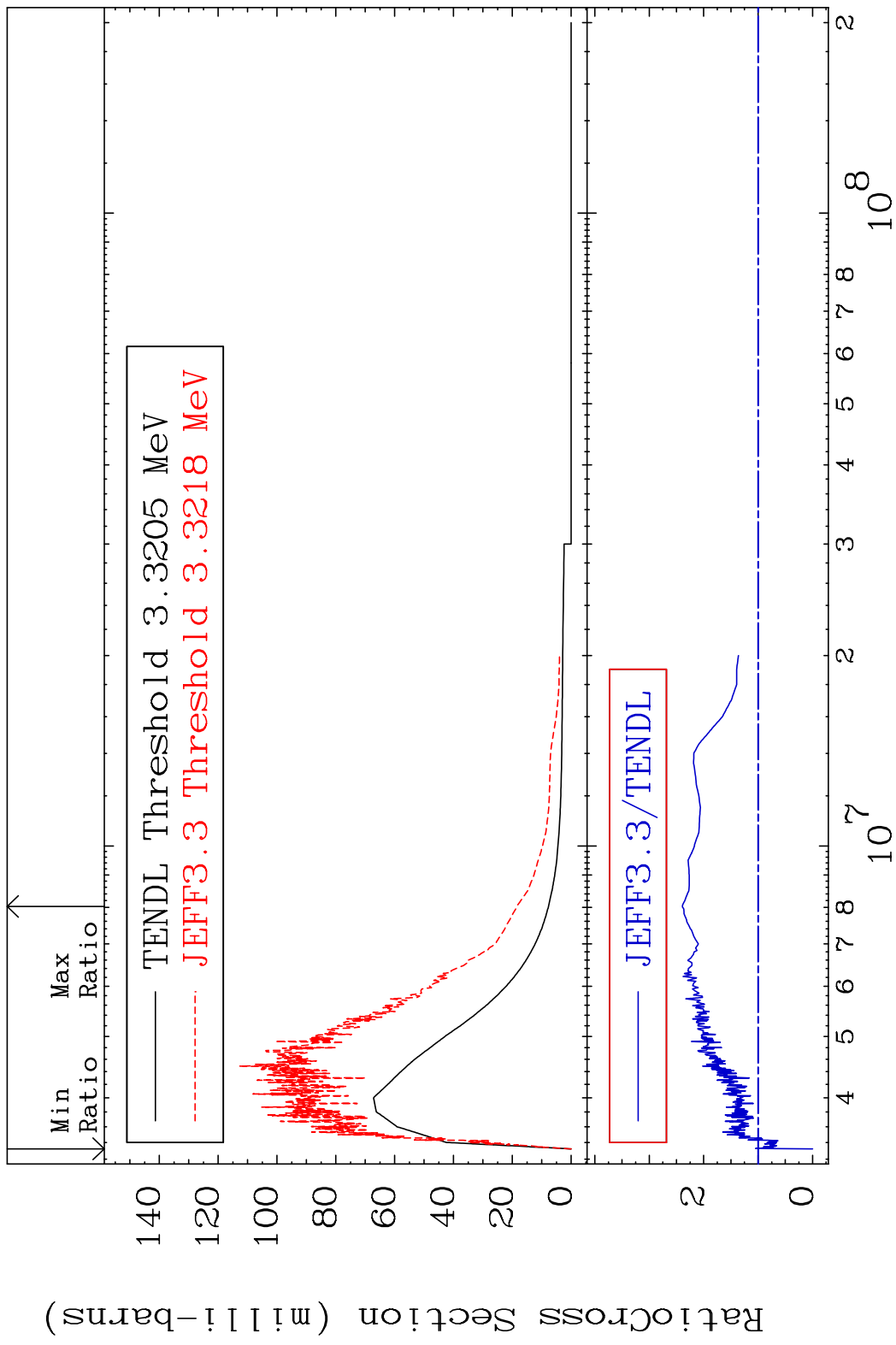


MAT 2825 MT= 56 (n, n') Level 28-Ni-58
 Cross Section -100.0 To 141.2 %

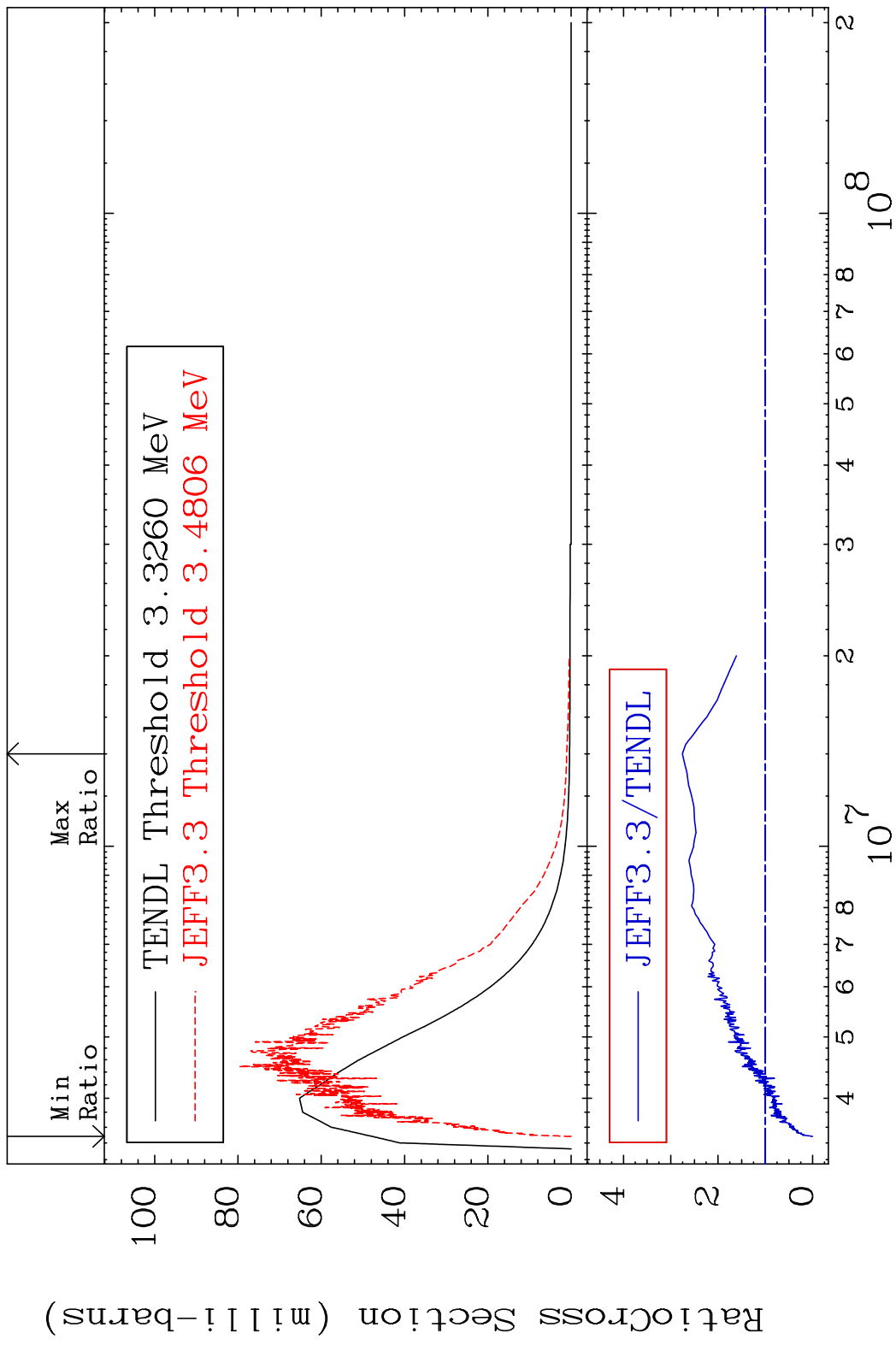


12 28-Ni-58

MAT 2825 MT= 57 (n,n') Level 28-Ni-58
 Cross Section -100.0 To 139.2 %



MAT 2825 MT= 58 (n,n') Level 28-Ni-58
 Cross Section -100.0 To 175.4 %

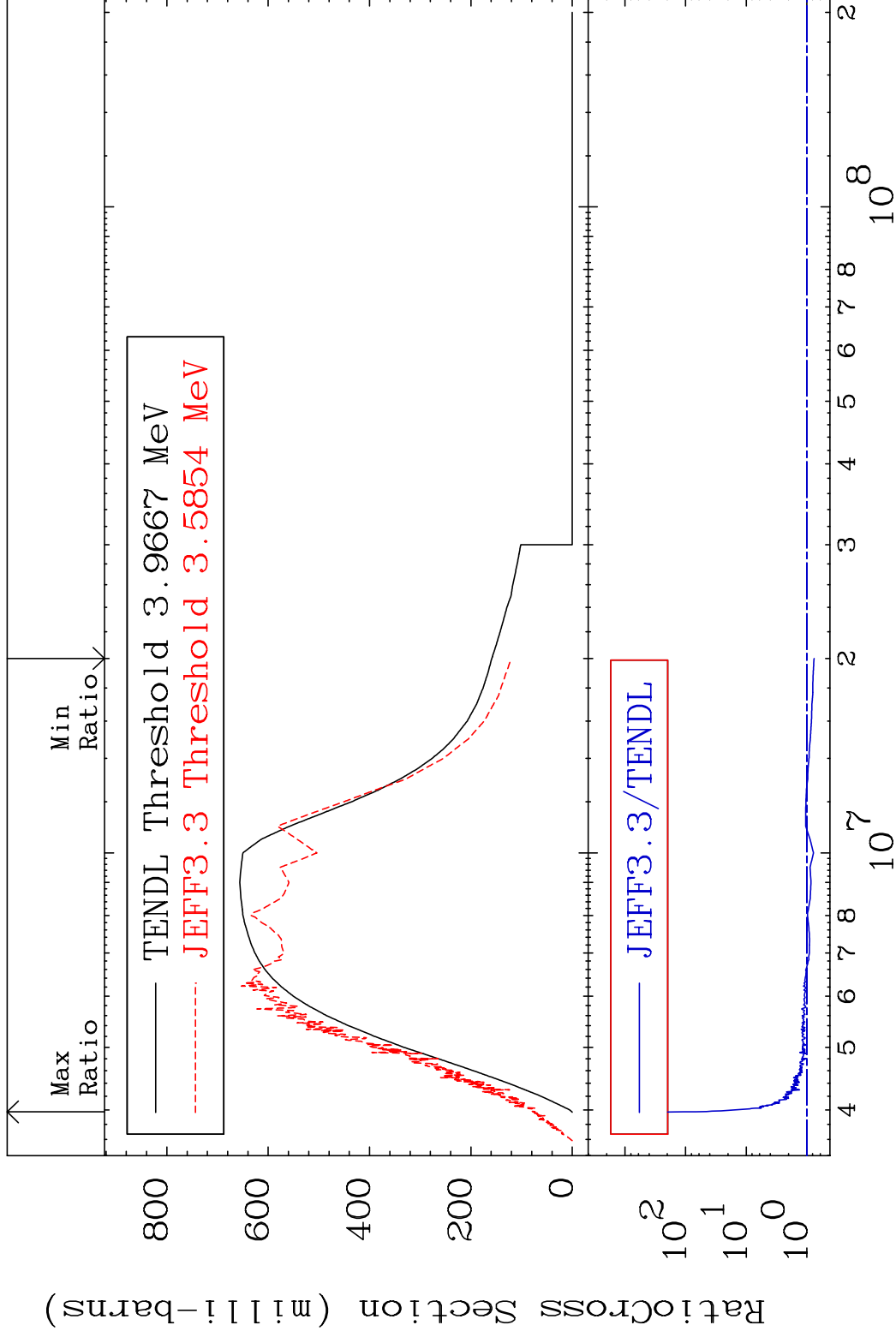


MAT 2825

(n,n') Continuum

28-Ni-58

Cross Section -24.25 To 9999. %



15

Incident Energy (eV)

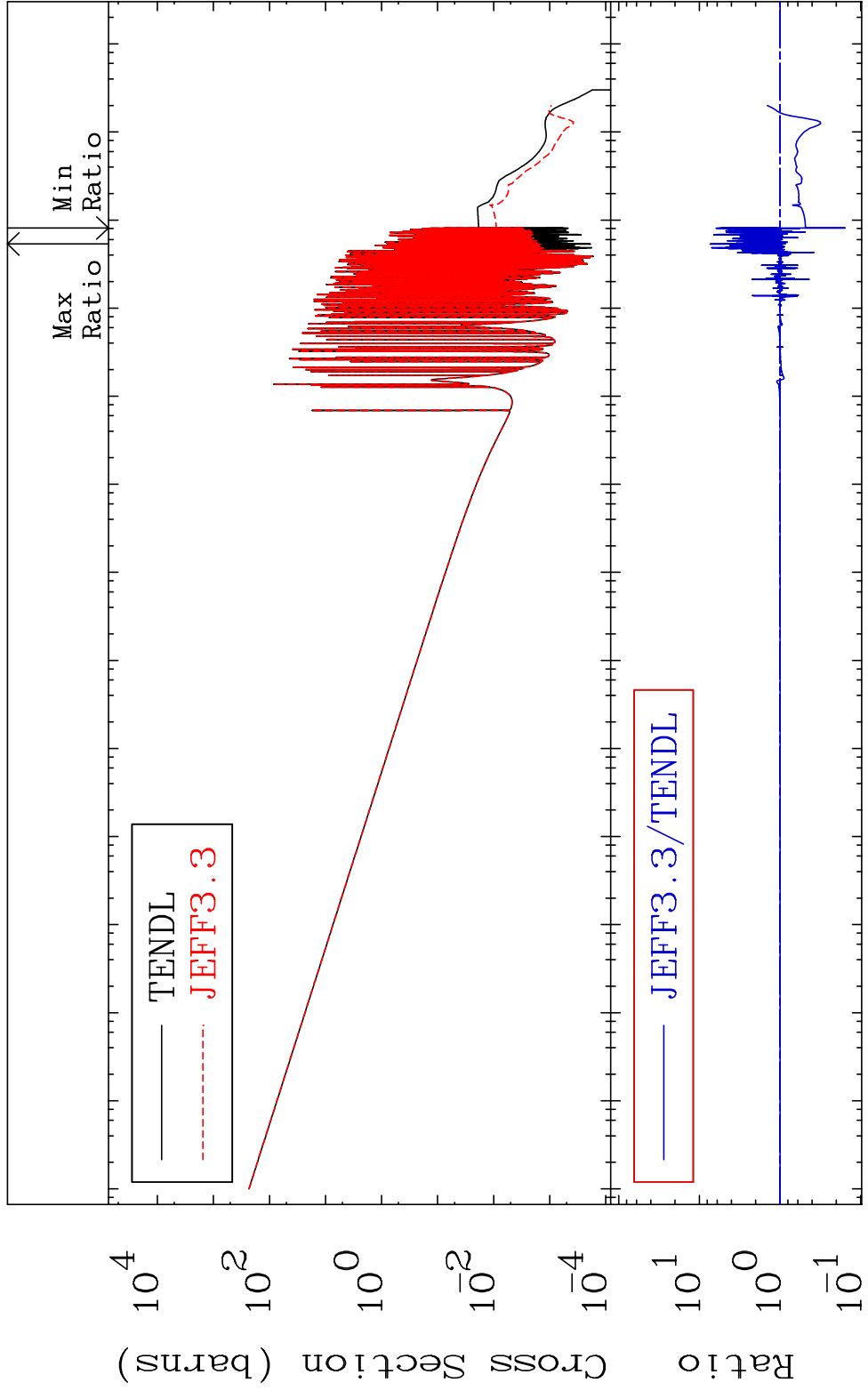
28-Ni-58

MAT 2825

(n, γ)

28-Ni-58

Cross Section -84.46 To 641.5 %



16

Incident Energy (eV)

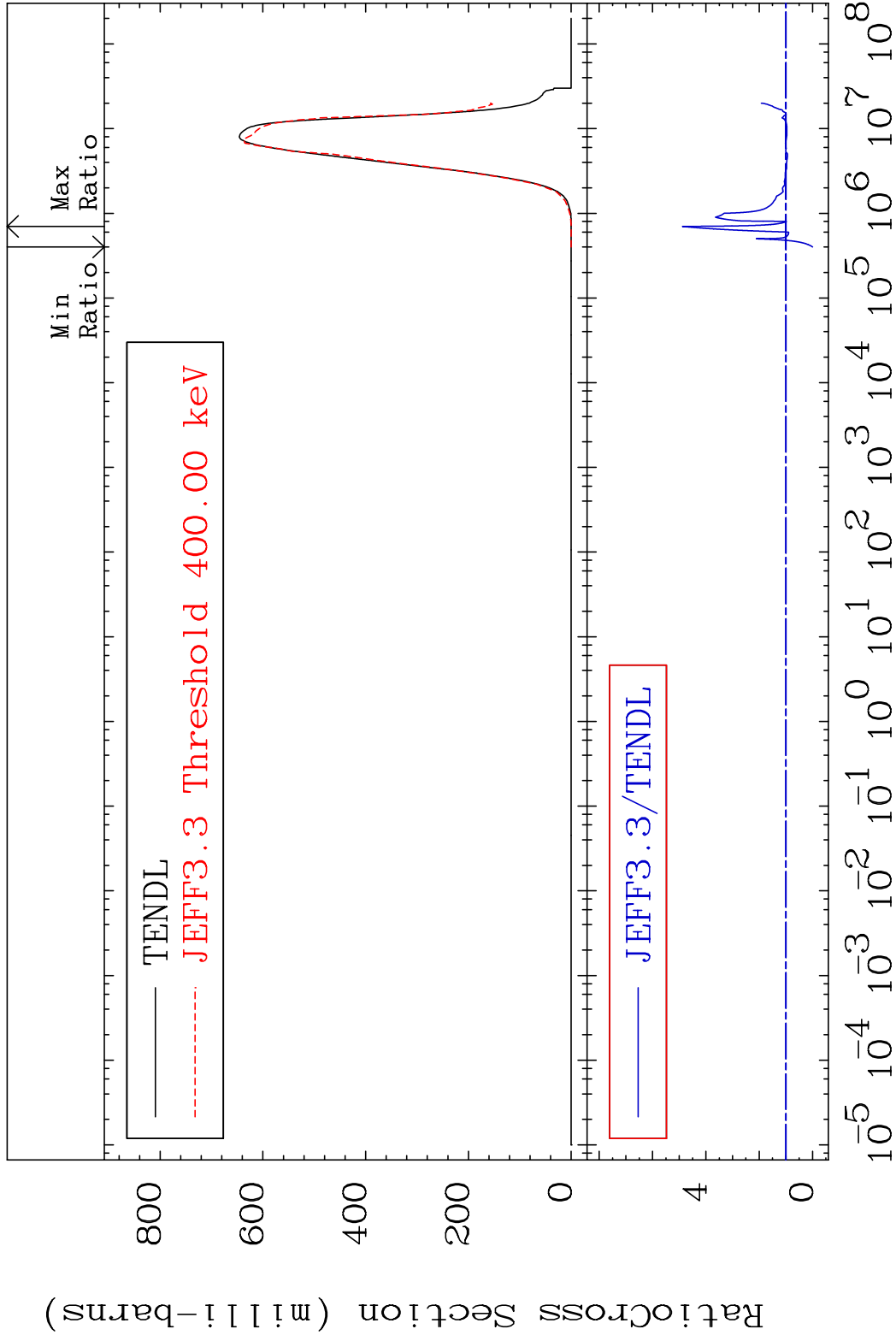
28-Ni-58

MAT 2825

(n, p)

28-Ni-58

Cross Section -100.0 To 388.3 %



17

Incident Energy (eV)

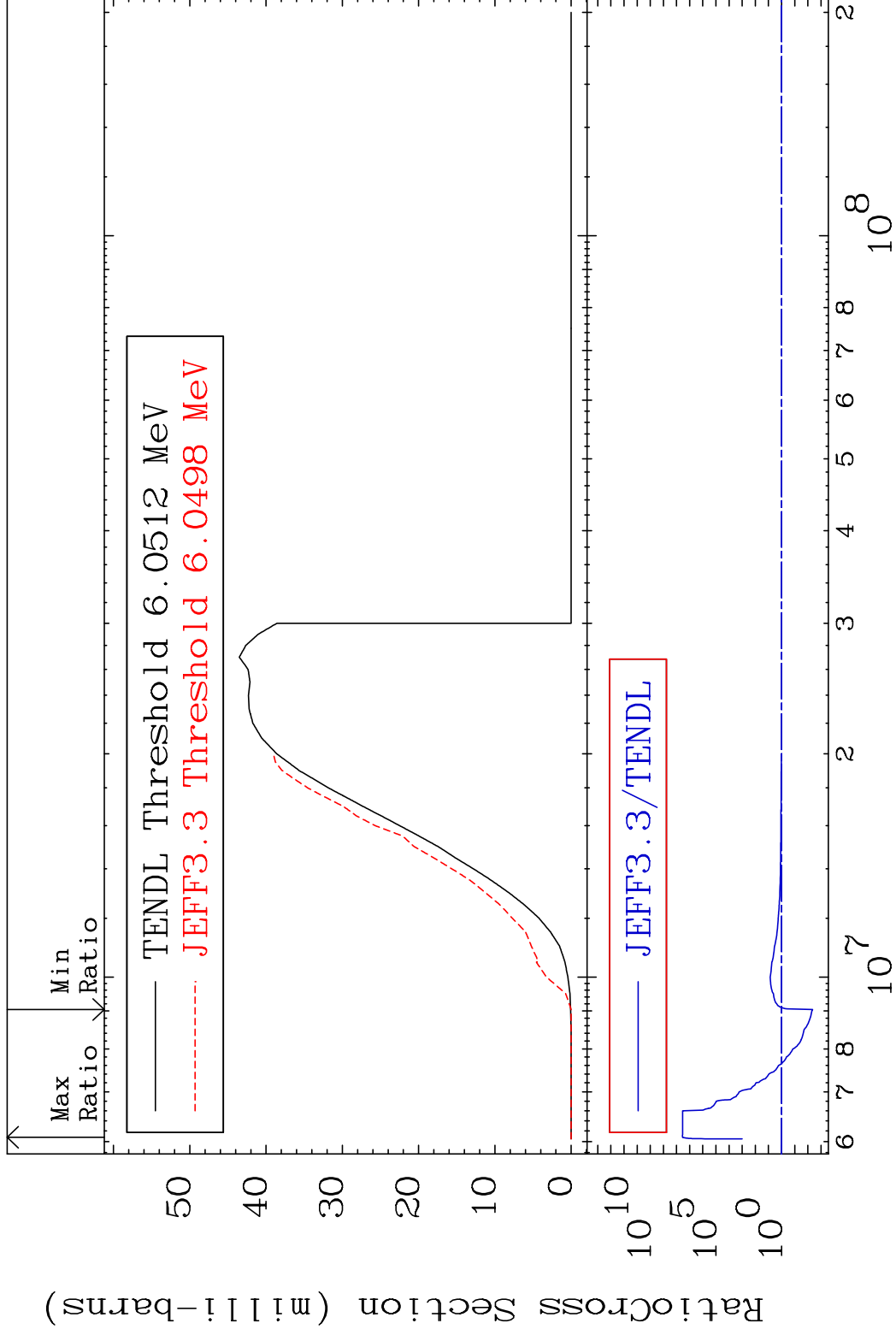
28-Ni-58

MAT 2825

(n, d)

28-Ni-58

Cross Section -99.56 To 9999. %



18

Incident Energy (eV)

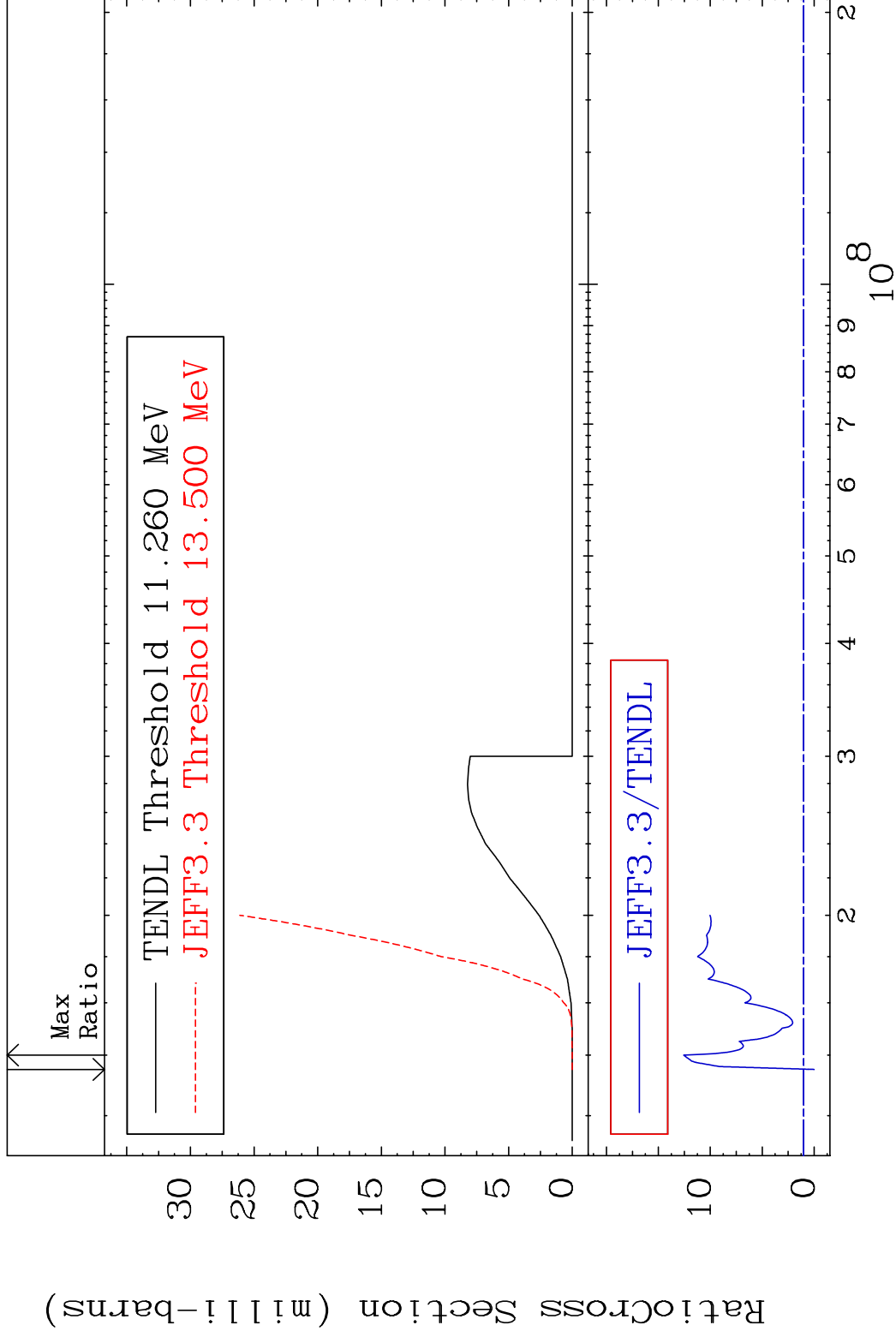
28-Ni-58

MAT 2825

(n, t)

28-Ni-58

Cross Section -100.0 To 1157. %

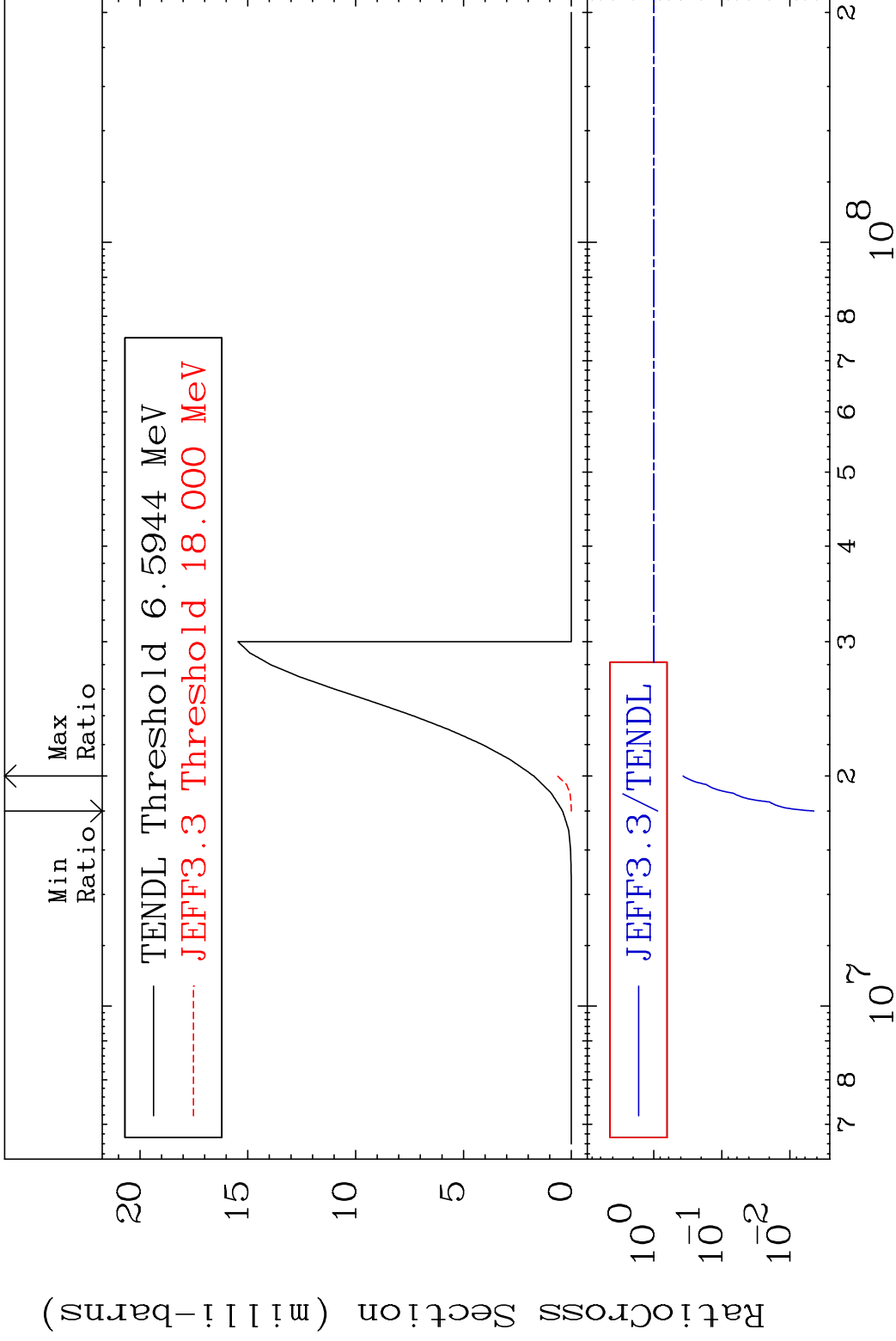


MAT 2825

(n, He-3)

28-Ni-58

Cross Section -99.56 To -63.01%



20

Incident Energy (eV)

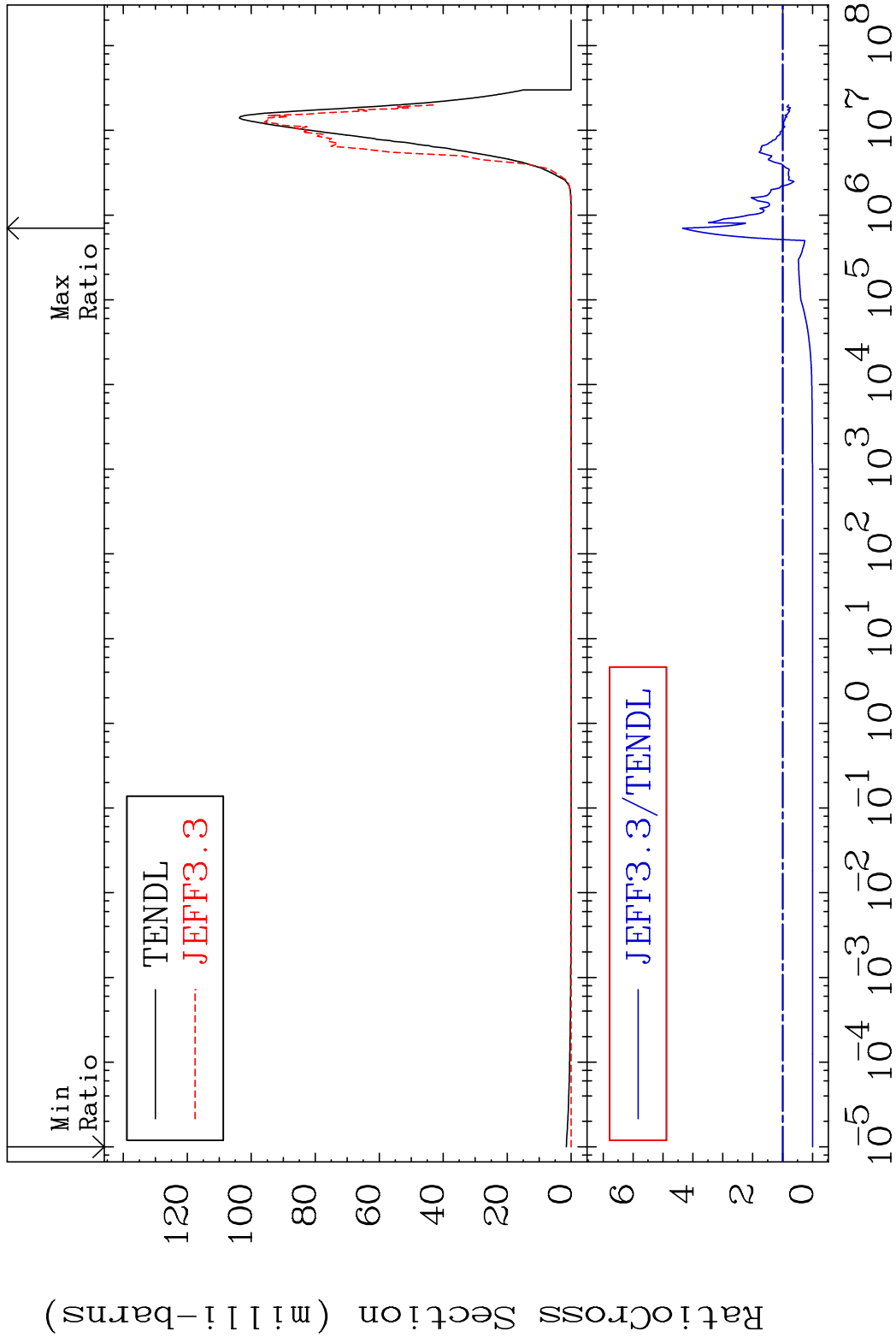
28-Ni-58

MAT 2825

(n, α)

28-Ni-58

Cross Section -100.0 To 335.3 %

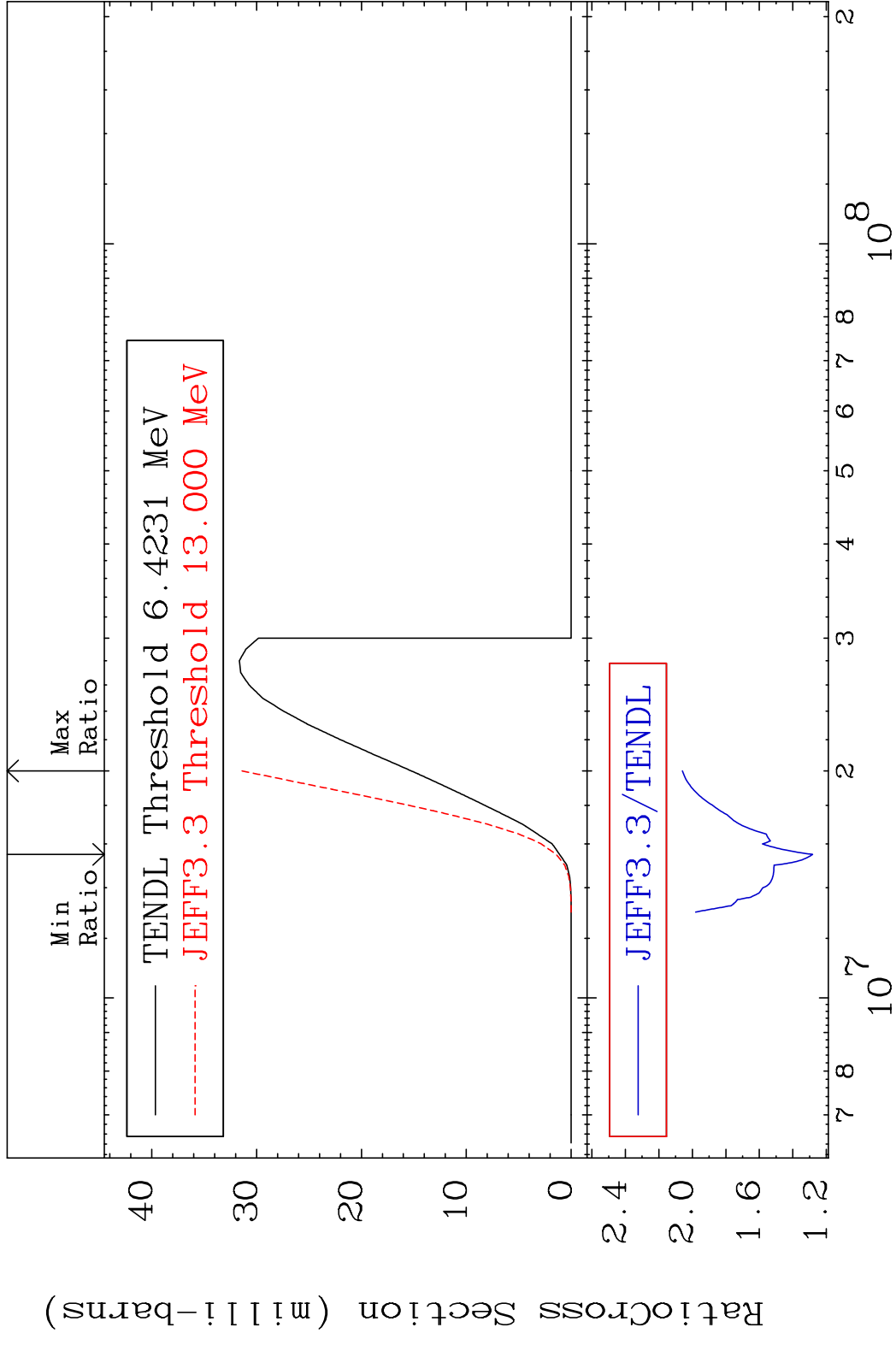


21

Incident Energy (eV)

28-Ni-58

MAT 2825 (n,p) α 28-Ni-58
 Cross Section 28.22 To 106.0 %



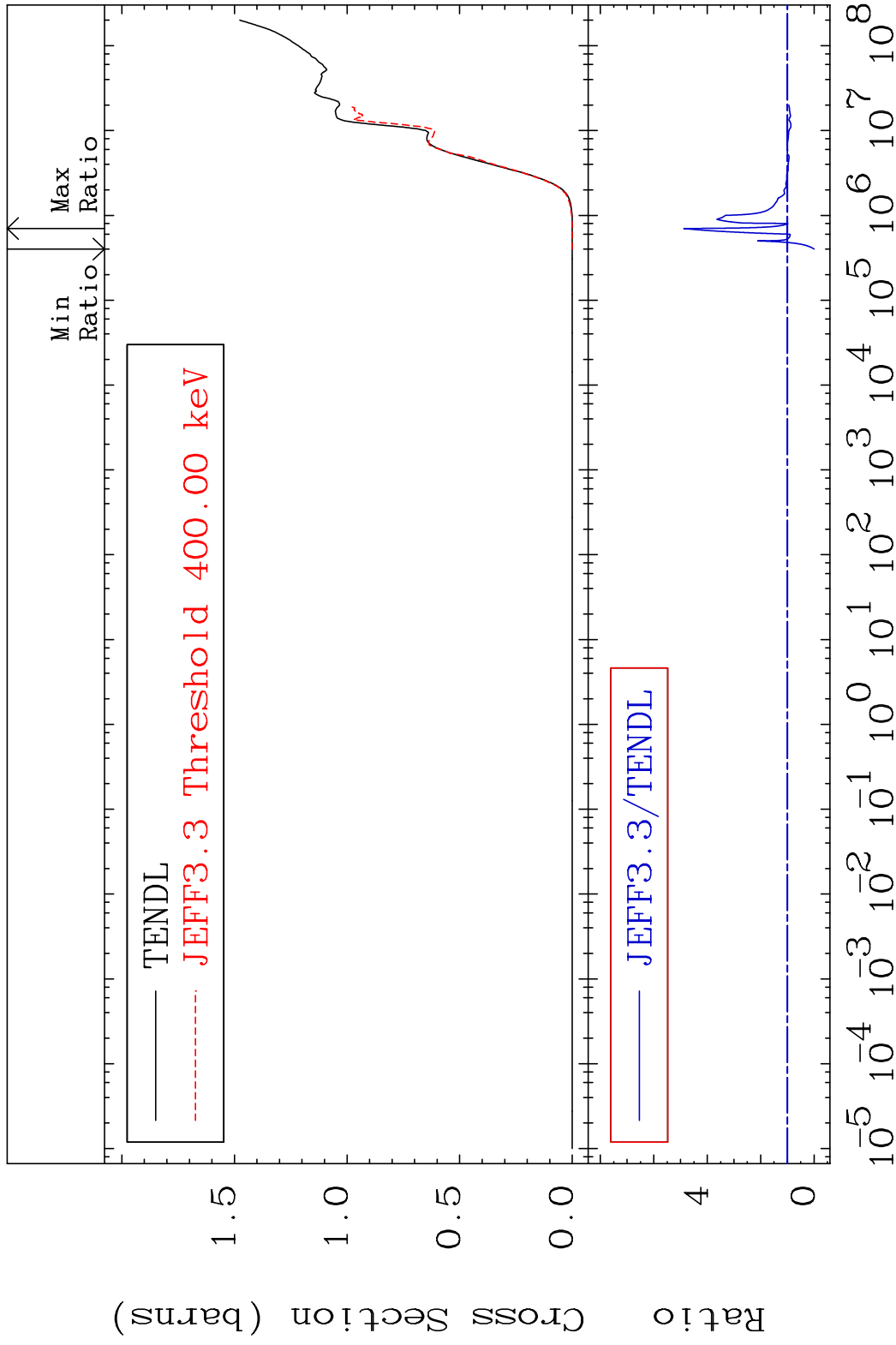
22 Incident Energy (eV) 28-Ni-58

MAT 2825

Hydrogen Production

²⁸Ni-58

Cross Section -100.0 To 388.3 %



23

Incident Energy (eV)

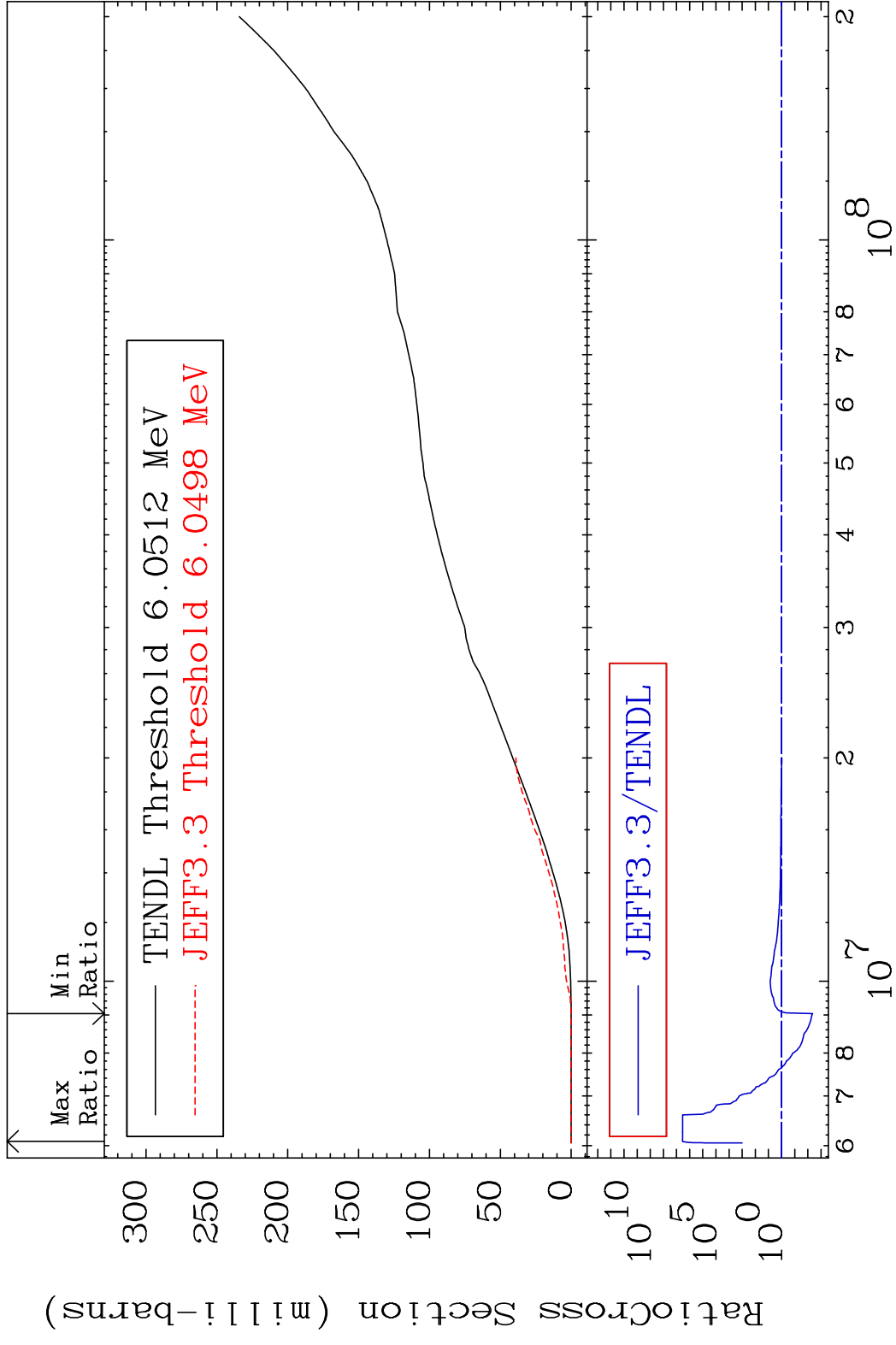
²⁸Ni-58

MAT 2825

Deuterium Production

28-Ni-58

Cross Section -99.56 To 9999. %



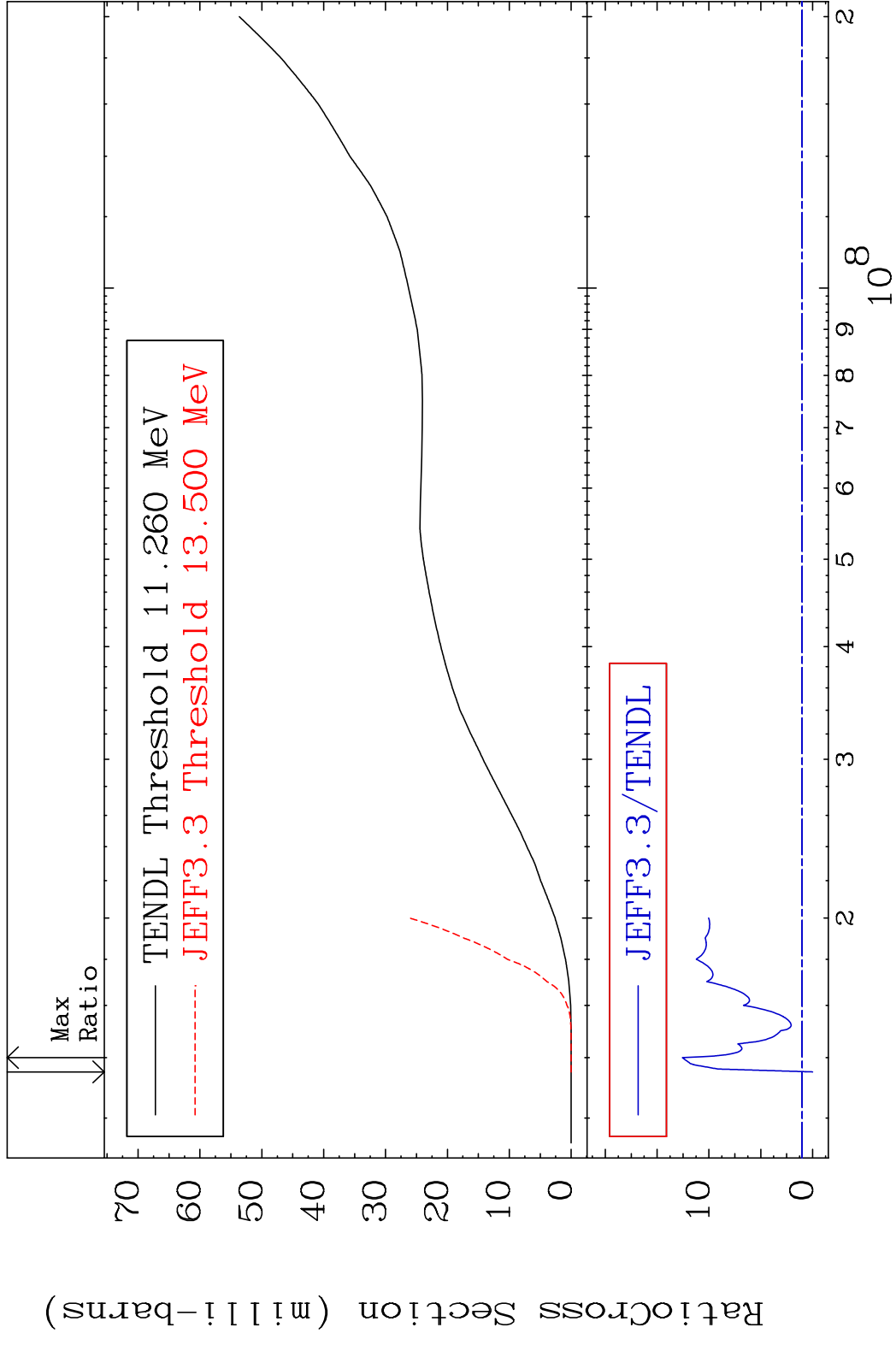
24

Incident Energy (eV)

28-Ni-58

MAT 2825

Tritium Production 28-Ni-58
Cross Section -100.0 To 1157. %



25

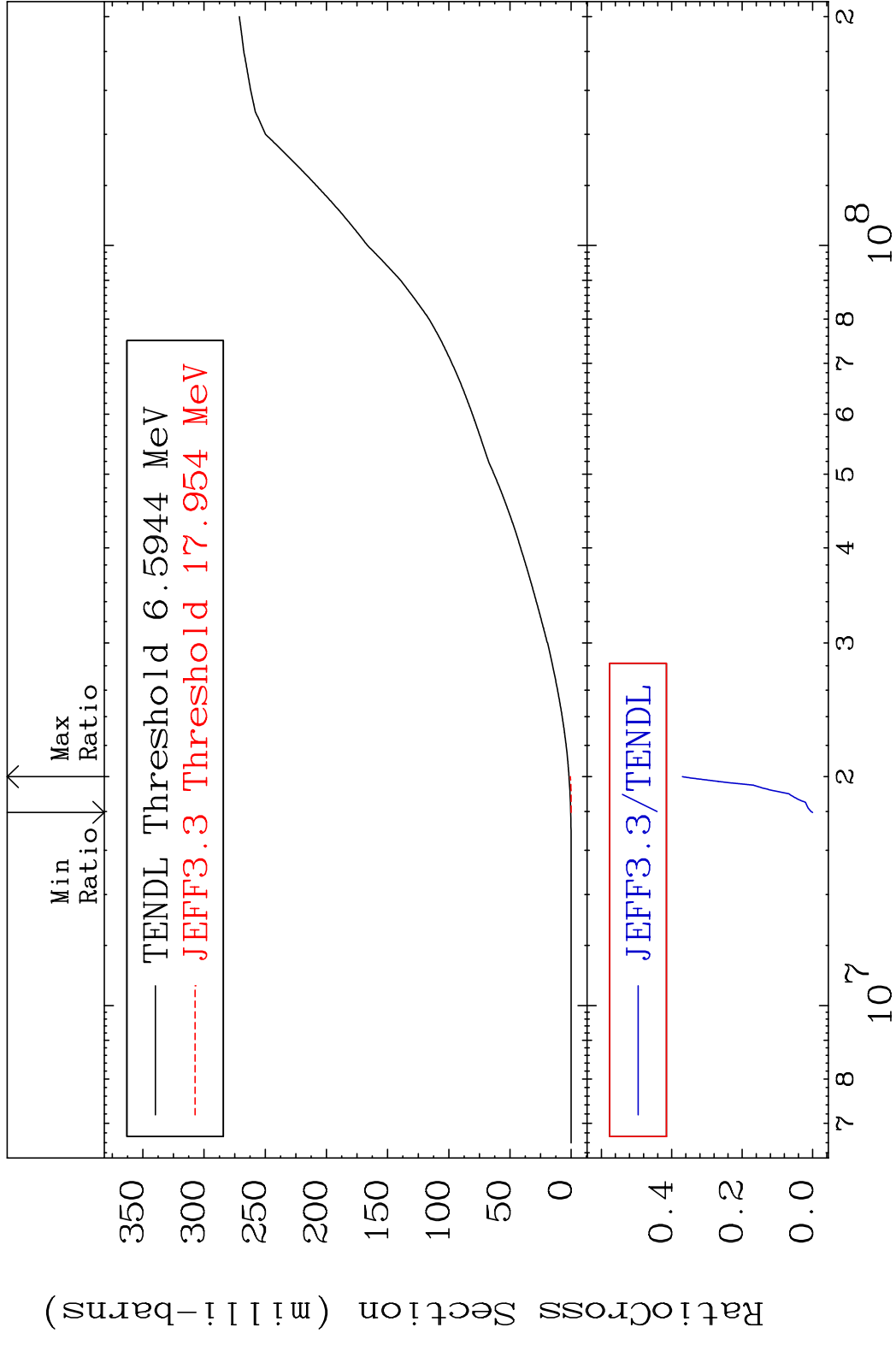
Incident Energy (eV) 28-Ni-58

MAT 2825

He-3 Production

28-Ni-58

Cross Section -100.0 To -63.01%



26

Incident Energy (eV)

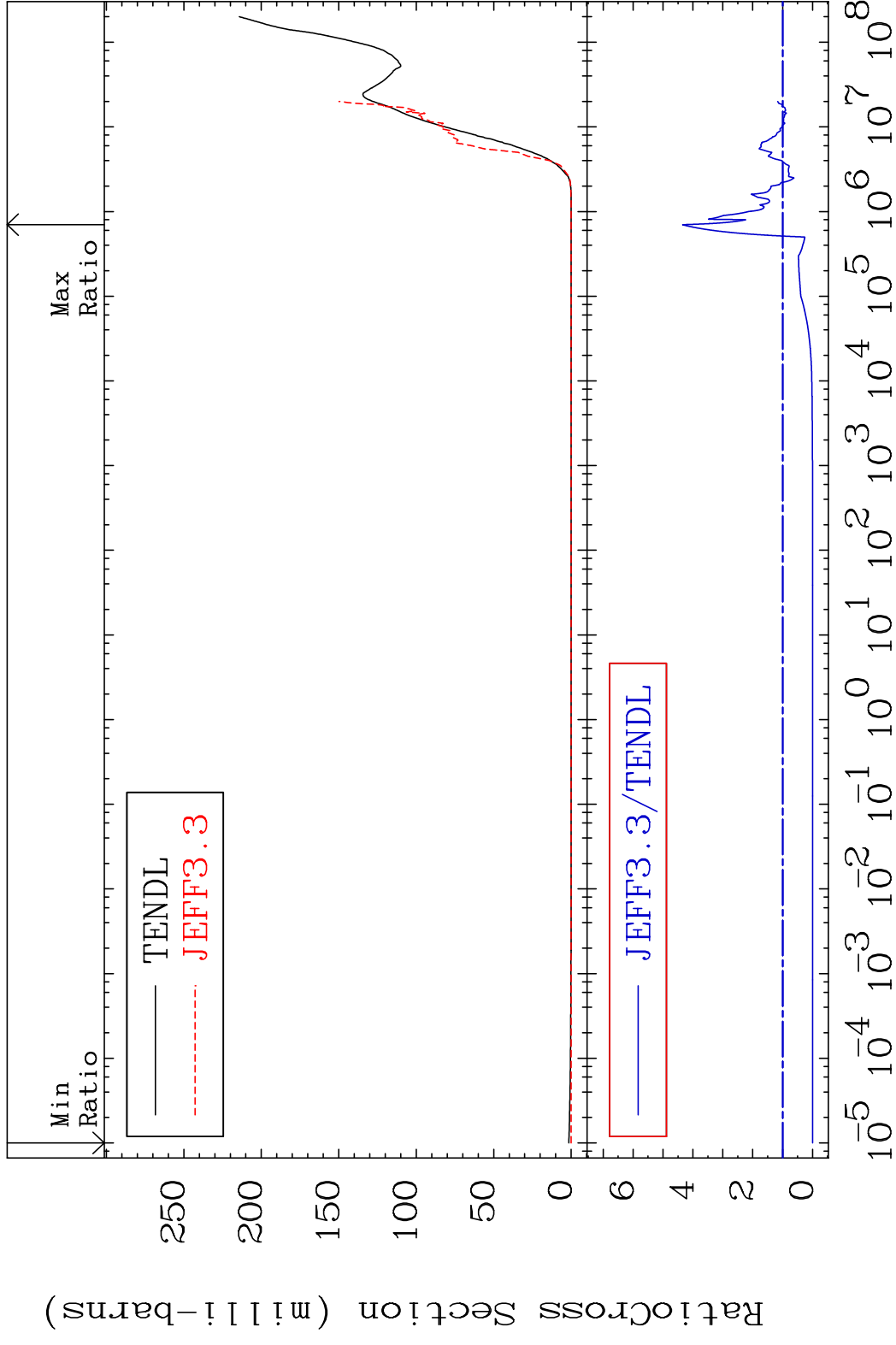
28-Ni-58

MAT 2825

He-4 Production

²⁸Ni-58

Cross Section -100.0 To 335.3 %

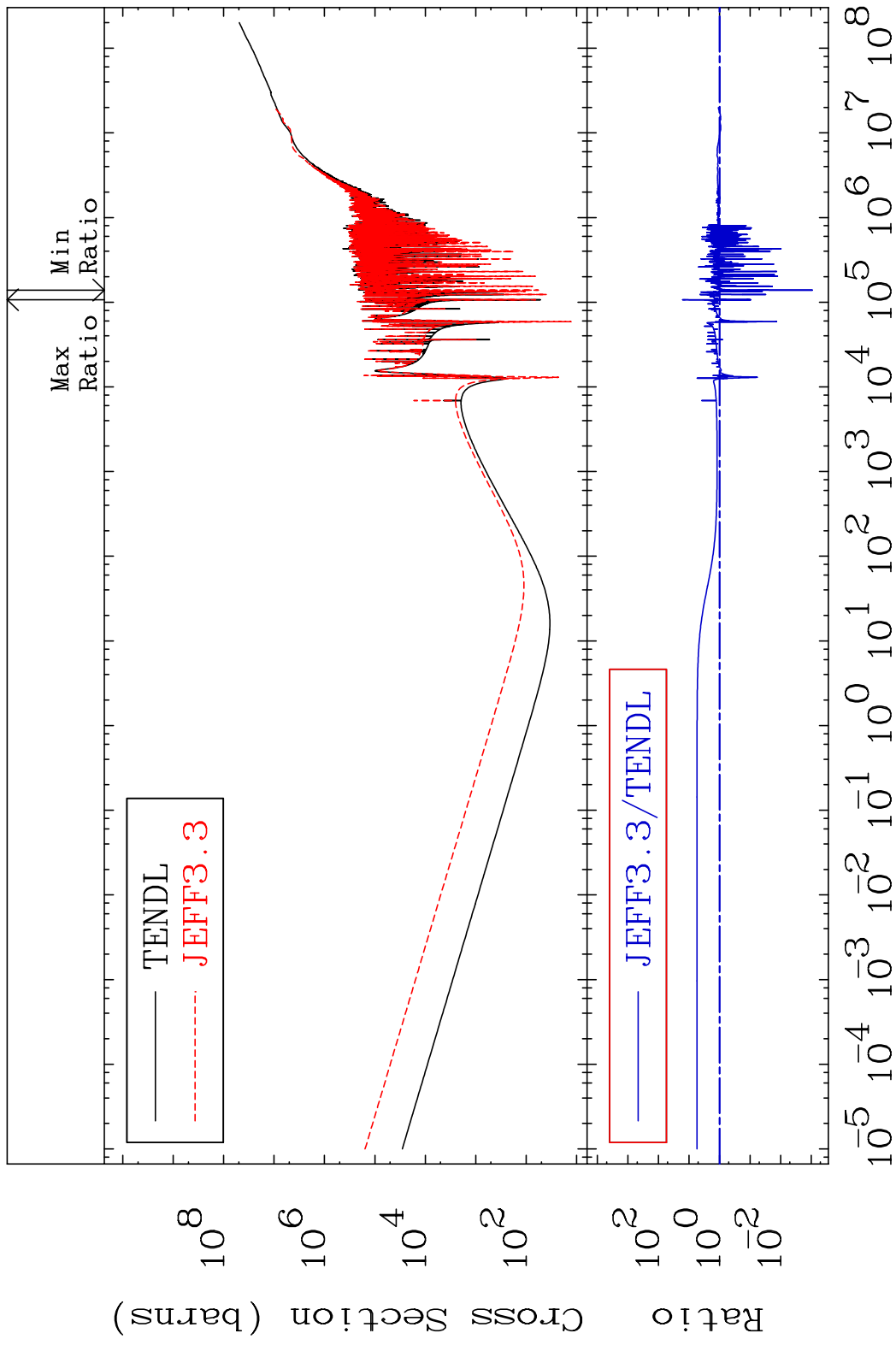


27

Incident Energy (eV)

²⁸Ni-58

MAT 2825 Kerma total (eV-barns) 28-Ni-58
 Cross Section -99.91 To 1552. %

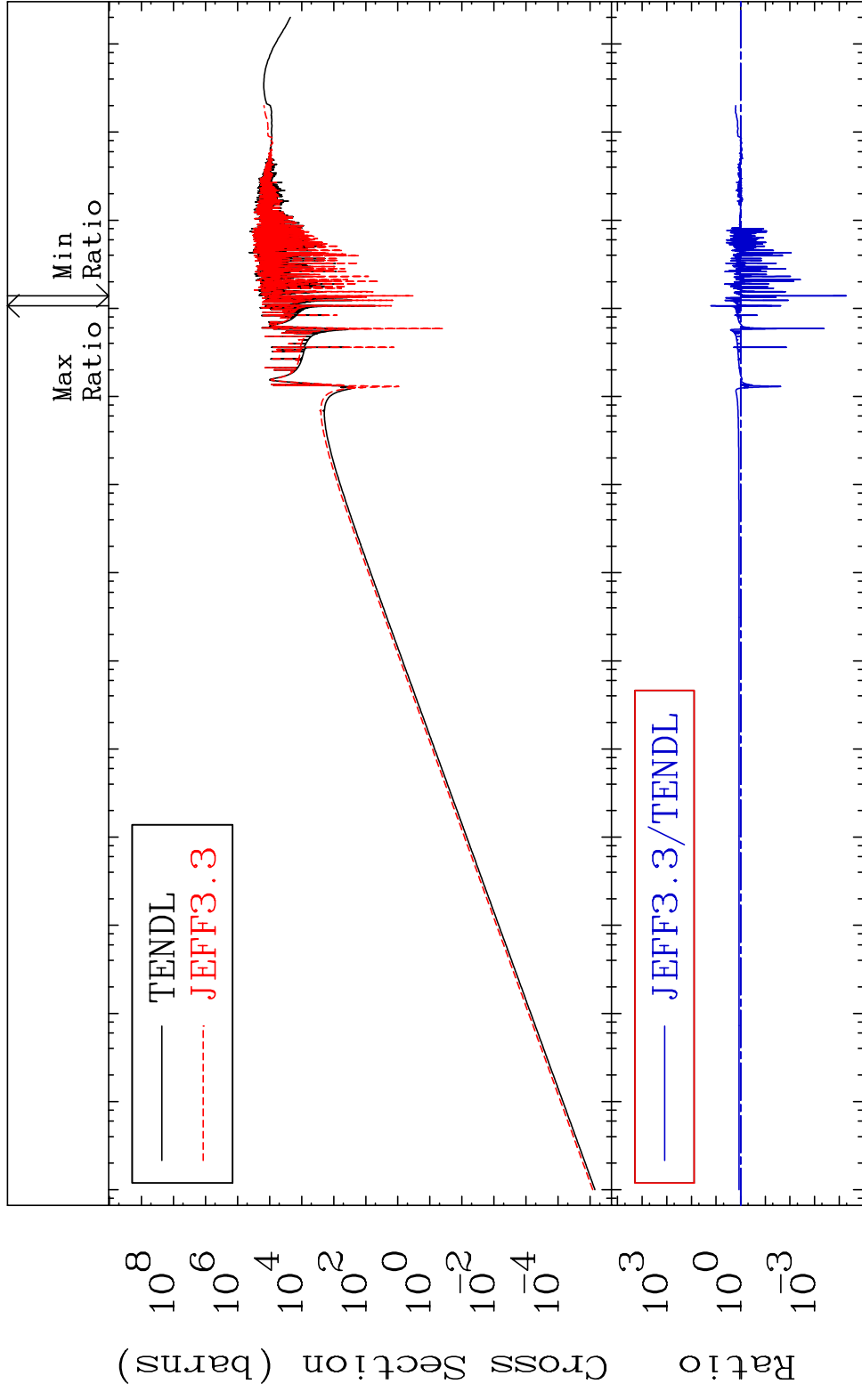


28 Incident Energy (eV) 28-Ni-58

MAT 2825

Kerma elastic
Cross Section

28-Ni-58
-99.99 To 1547. %

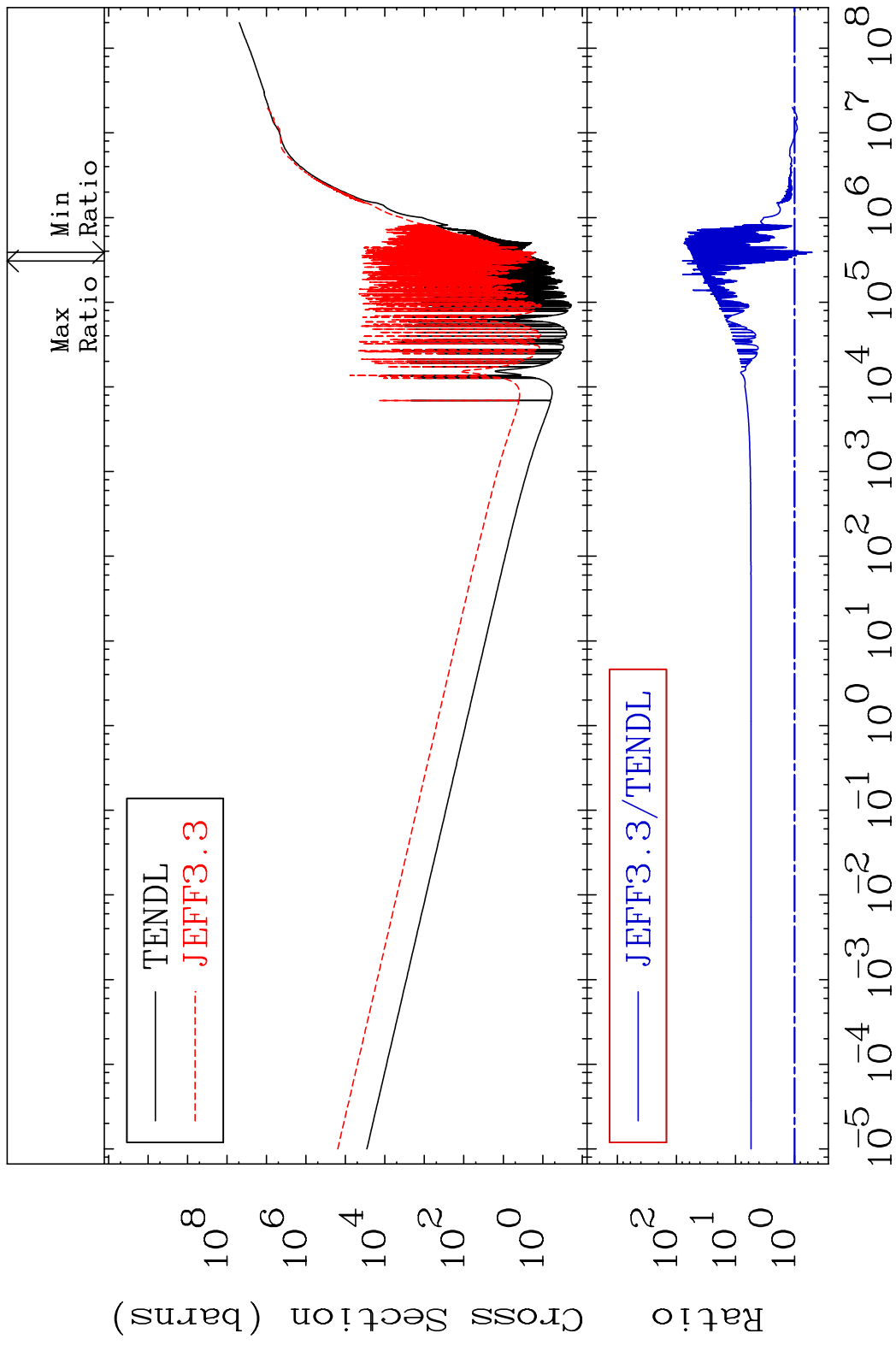


Cross Section (barns)
 10^8
 10^6
 10^4
 10^2
 10^0
 10^{-2}
 10^{-4}
 10^{-6}
 10^{-8}

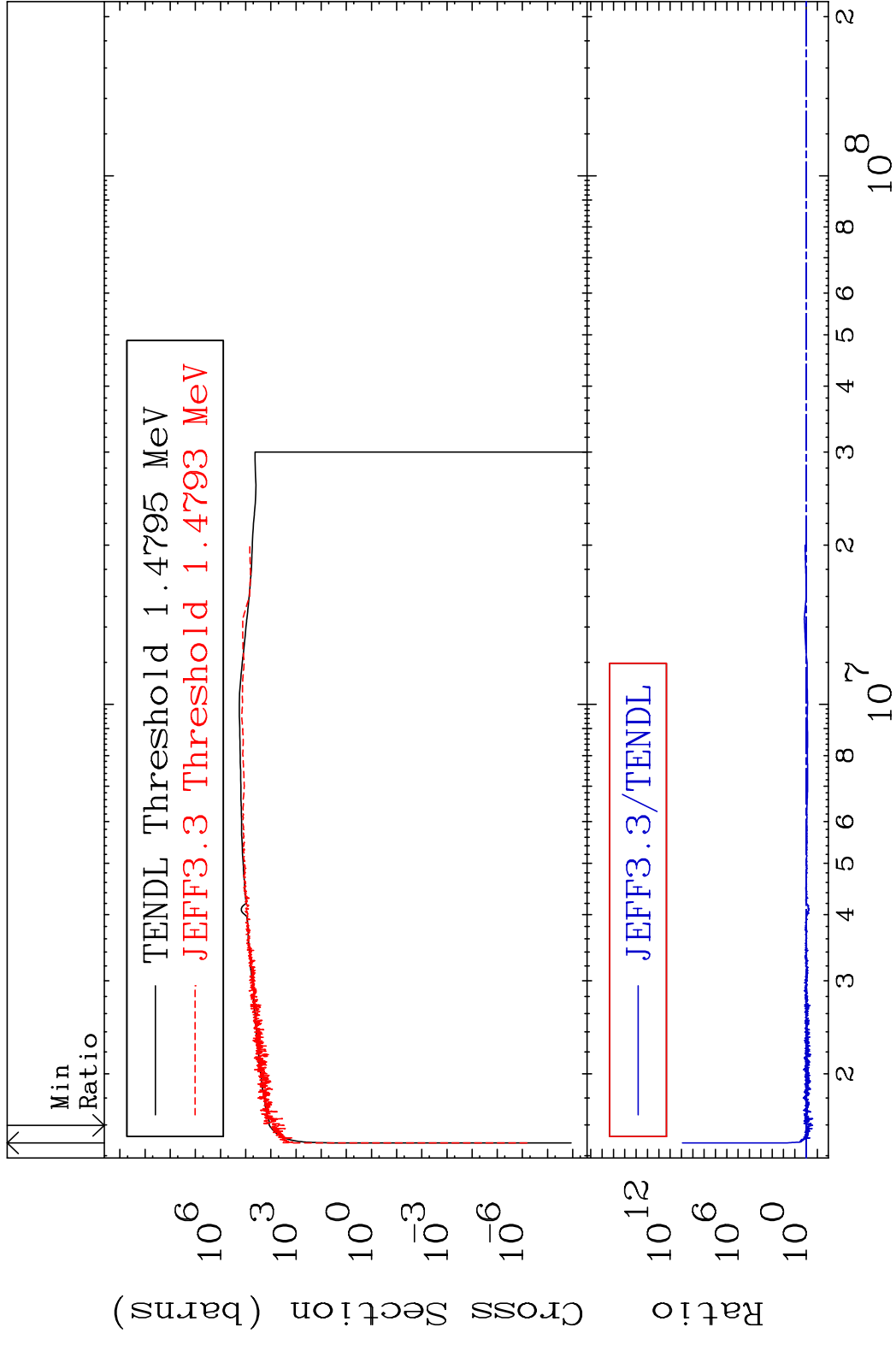
Ratio
 10^3
 10^0
 10^{-3}

Incident Energy (eV)
 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

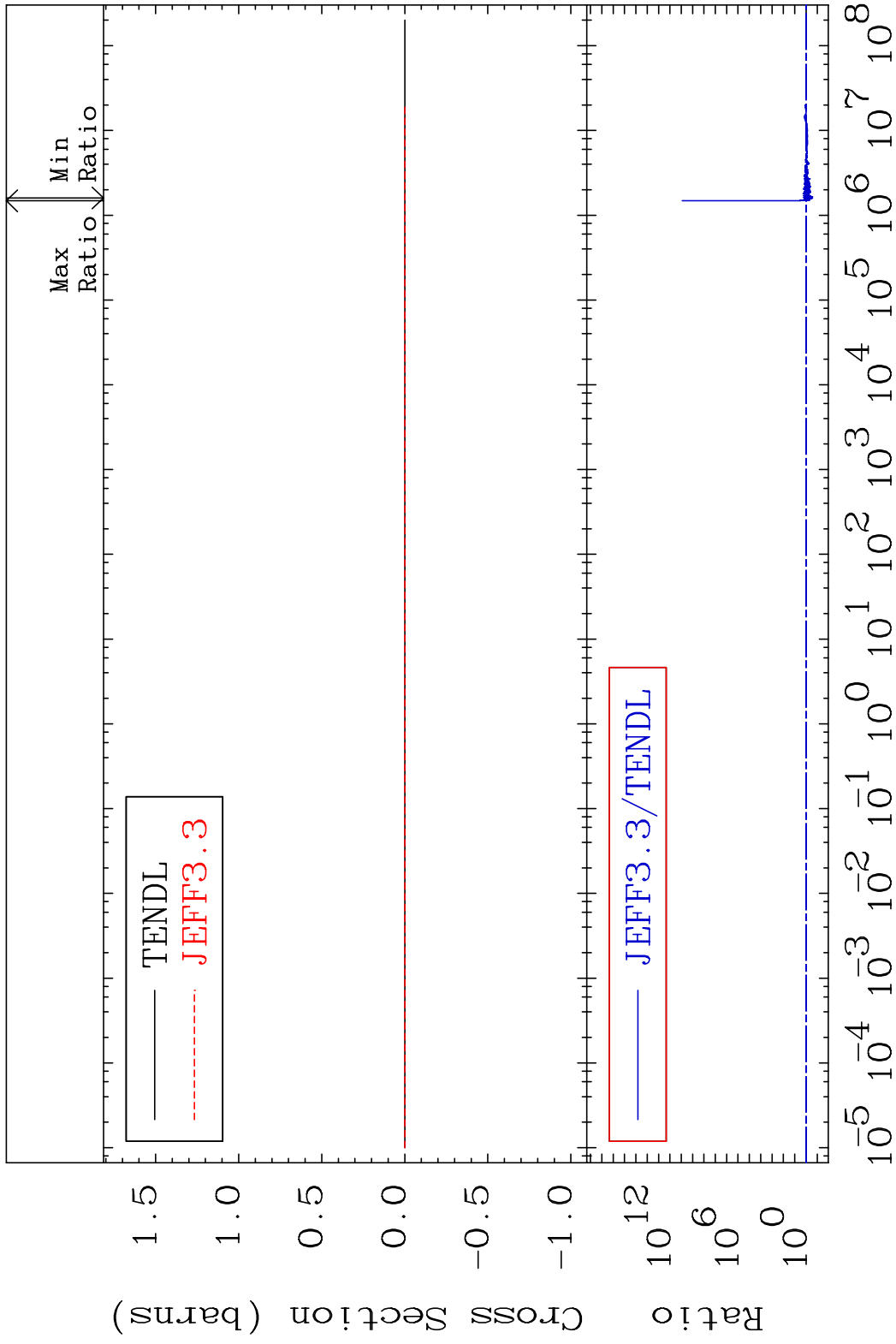
MAT 2825 Kerma non-elastic (all but mt2) 28-Ni-58
 Cross Section -50.33 To 7841. %



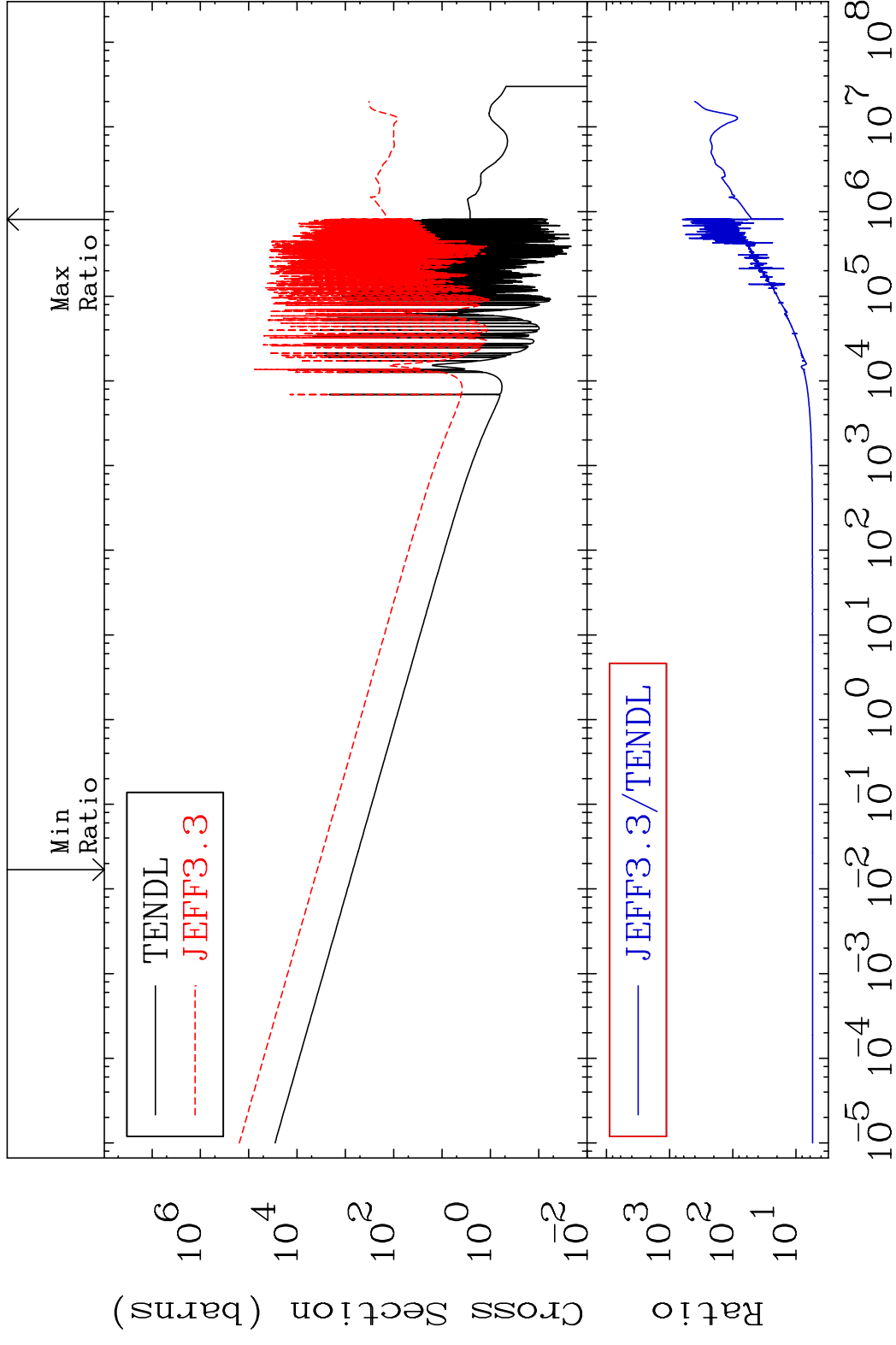
MAT 2825 Kerma inelastic (mt51-91) 28-Ni-58
 Cross Section -72.89 To 9999. %



MAT 2825 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-58
 Cross Section -72.89 To 9999. %

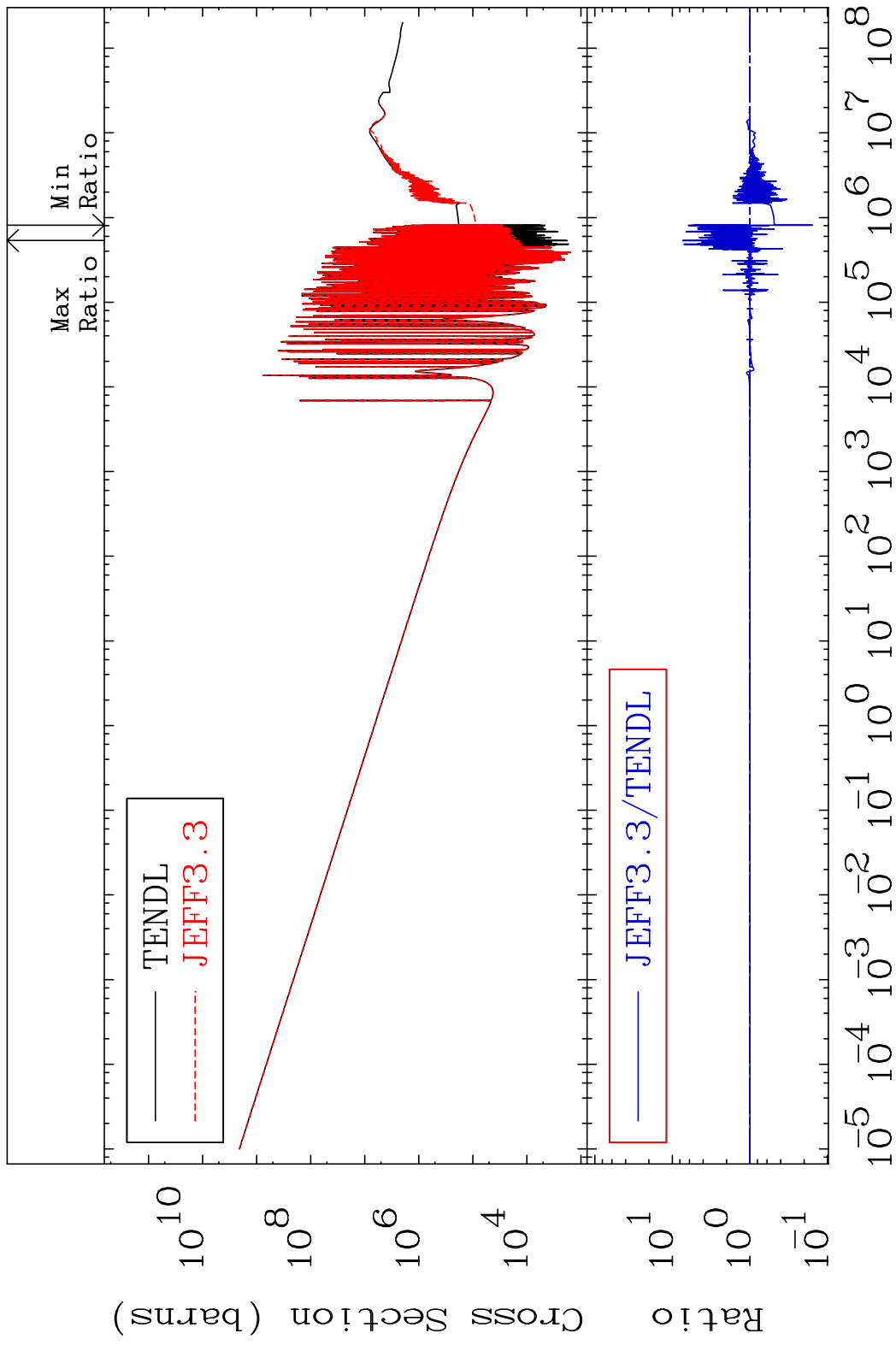


MAT 2825 Kerma capture (mt102) 28-Ni-58
 Cross Section 447.2 To 9999. %



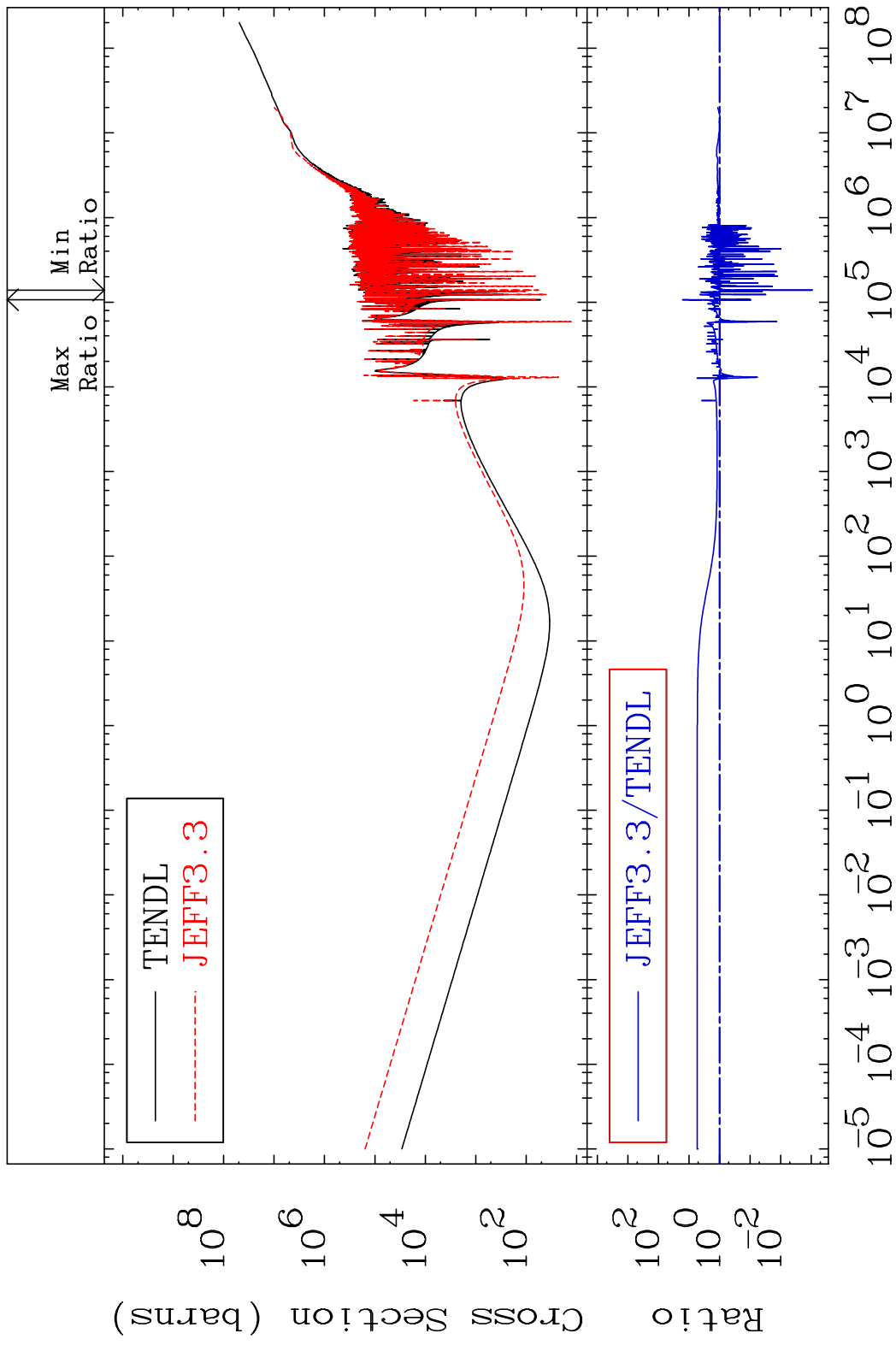
33 Incident Energy (eV) 28-Ni-58

MAT 2825 Total photon (eV-barns) 28-Ni-58
 Cross Section -84.43 To 642.0 %



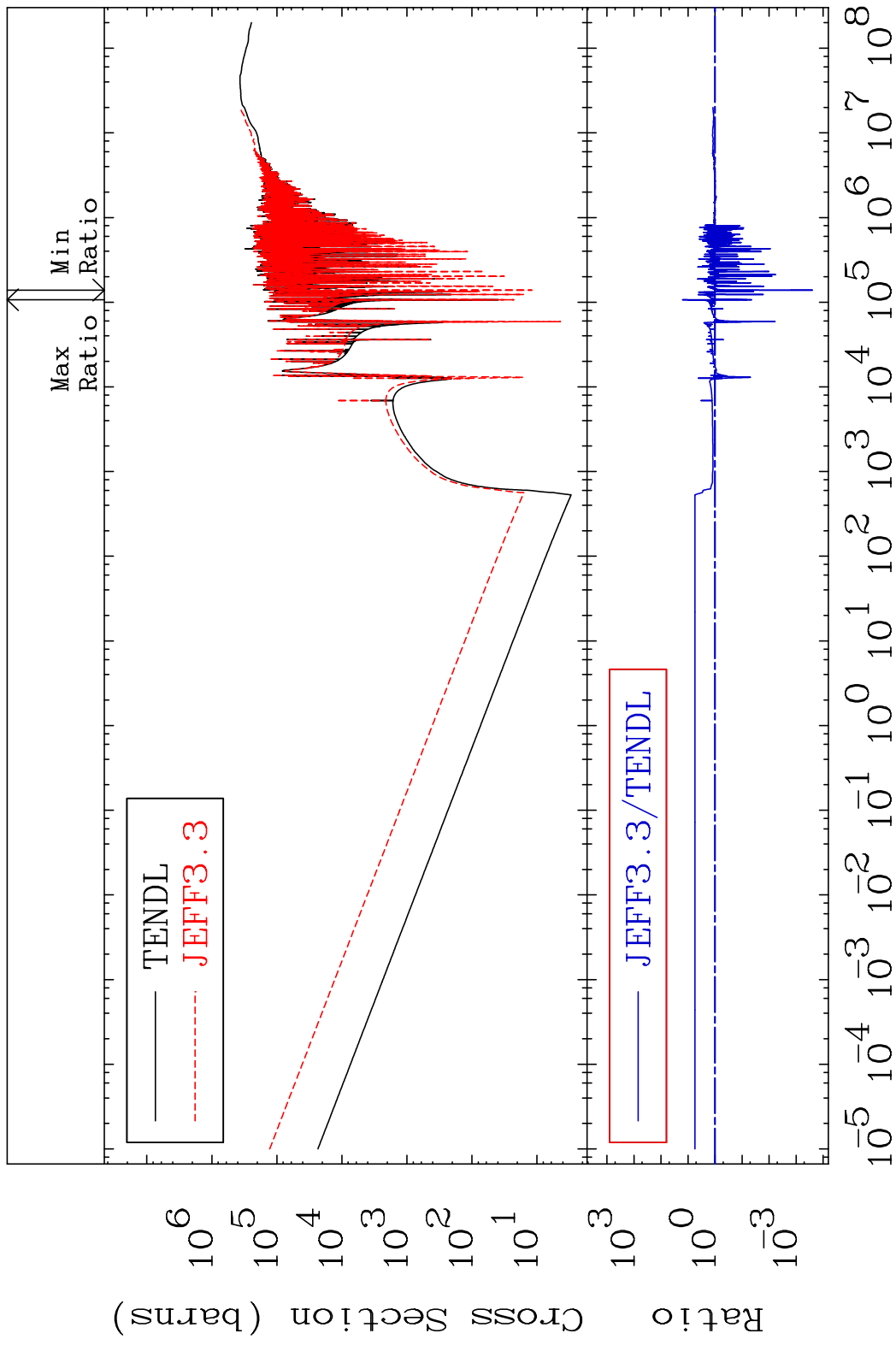
34 Incident Energy (eV) 28-Ni-58

MAT 2825 Total kinematic kerma (high limit) 28-Ni-58
 Cross Section -99.91 To 1552. %



35 Incident Energy (eV) 28-Ni-58

MAT 2825 Dpa total (eV-barns) 28-Ni-58
 Cross Section -99.98 To 1517. %



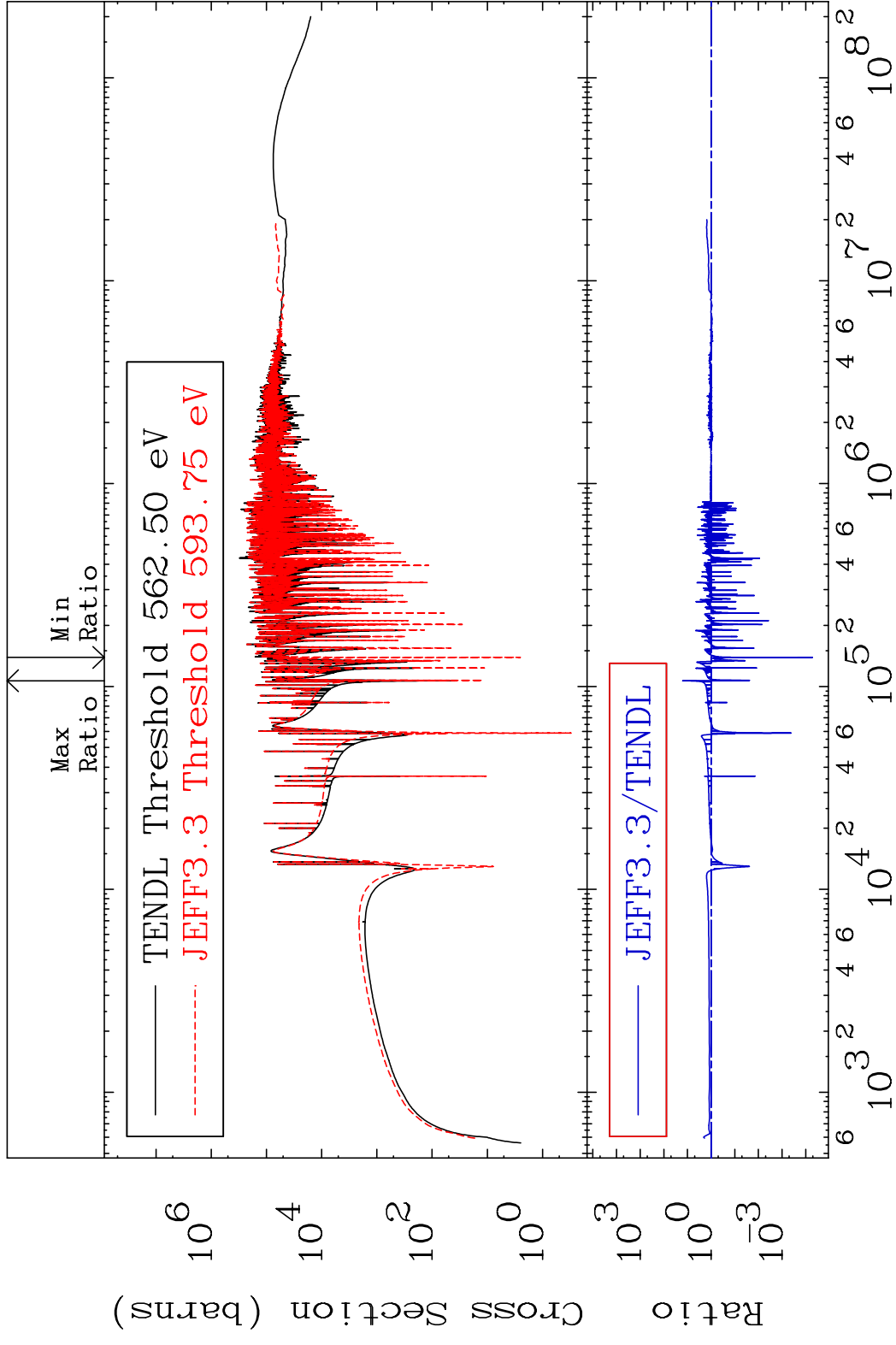
36 Incident Energy (eV) 28-Ni-58

MAT 2825

Dpa elastic (mt2)

28-Ni-58

Cross Section -99.99 To 1547. %

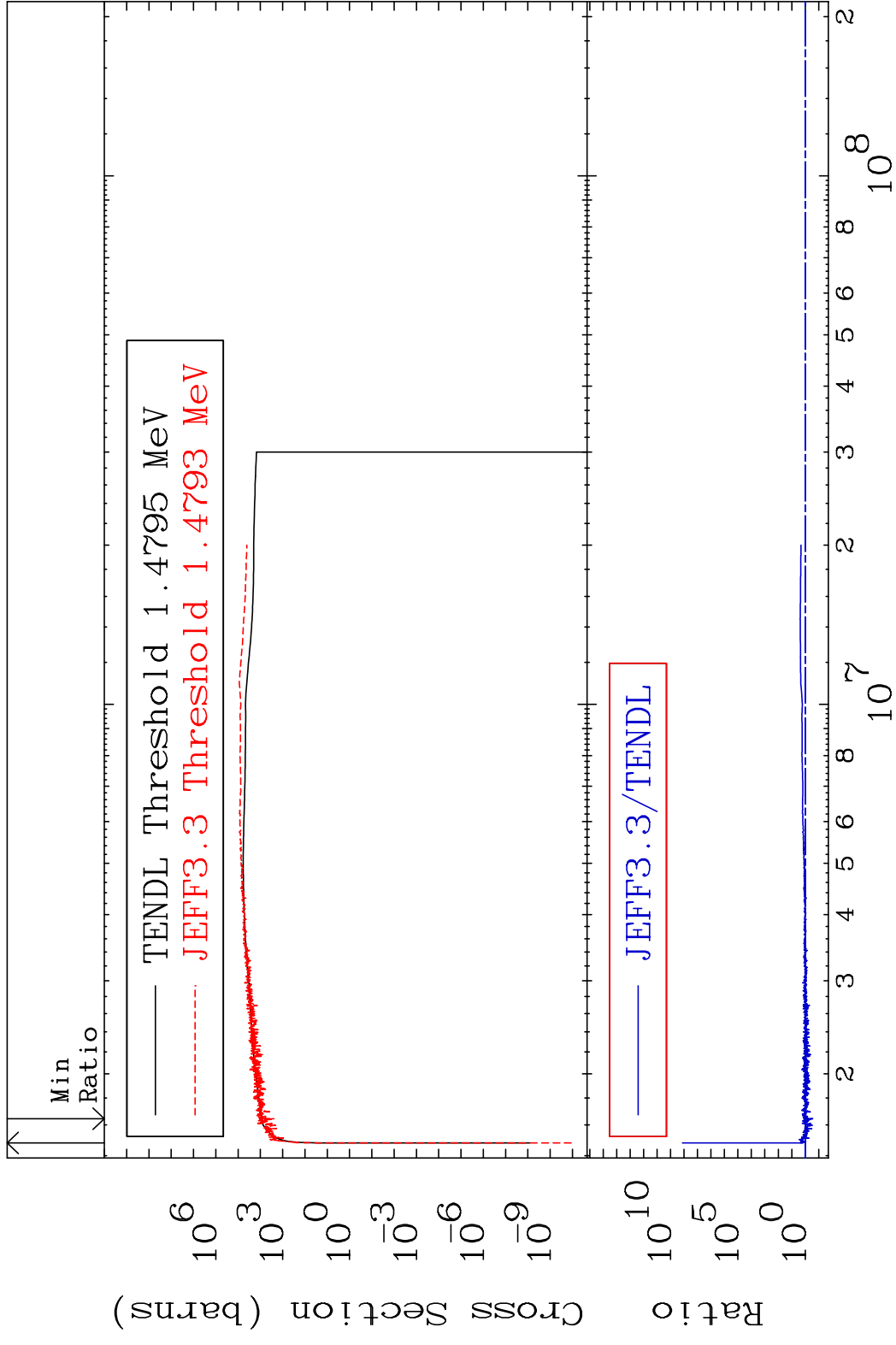


37

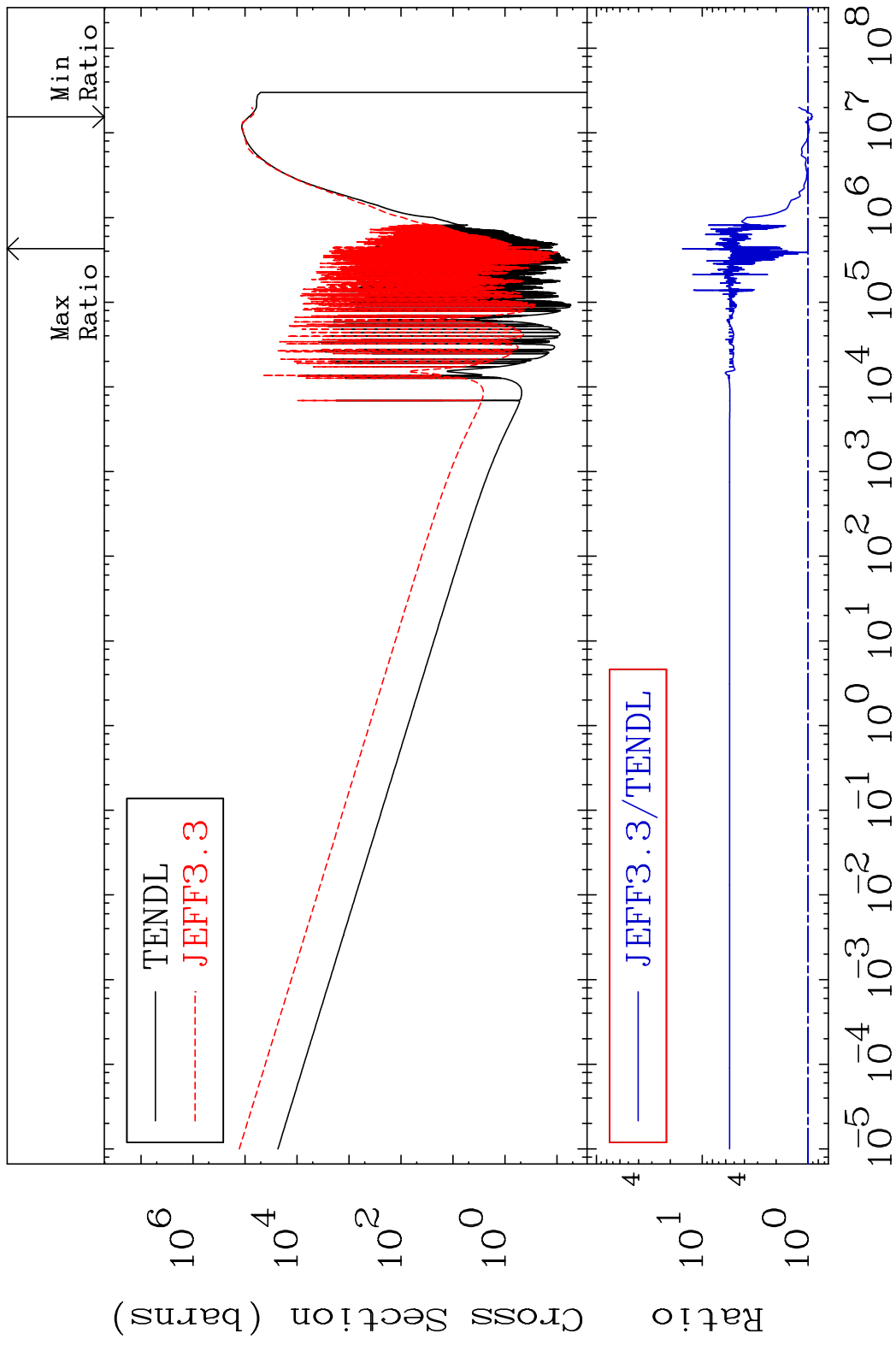
Incident Energy (eV)

28-Ni-58

MAT 2825 Dpa inelastic (mt51-91) 28-Ni-58
 Cross Section -71.55 To 9999. %

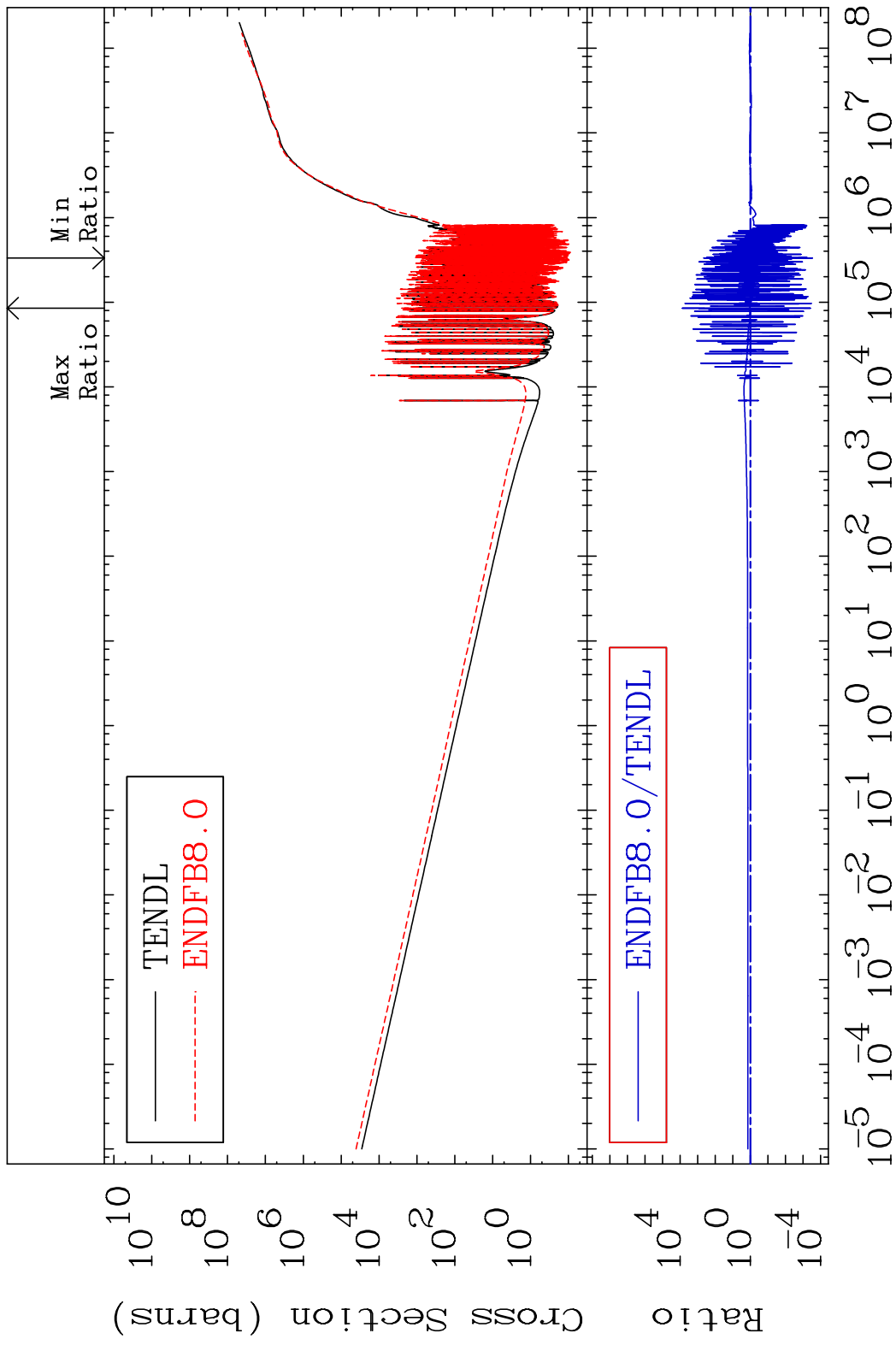


MAT 2825 Dpa disappearance (mt102 -120) 28-Ni-58
 Cross Section -9.417 To 1441. %



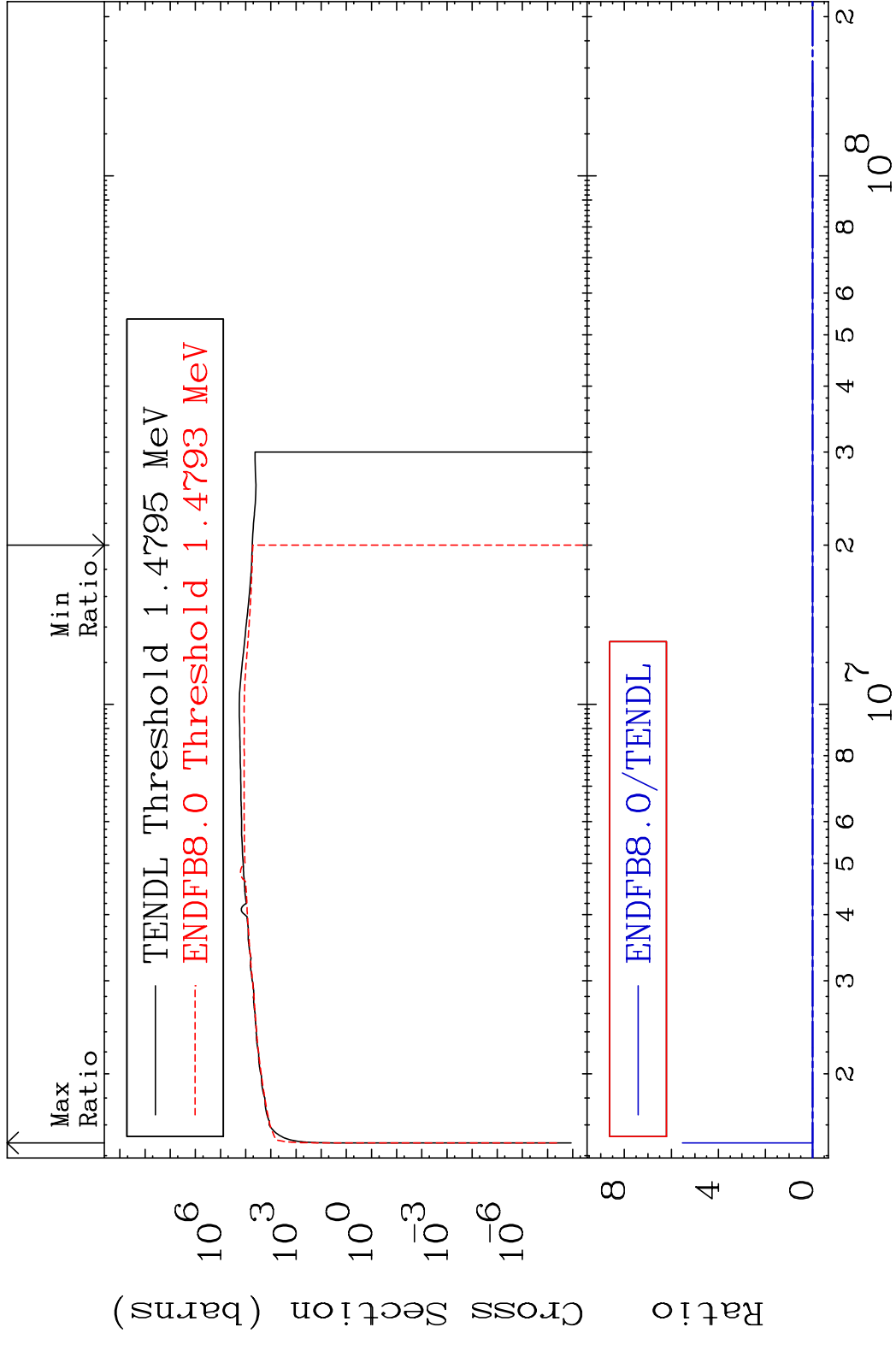
39 Incident Energy (eV) 28-Ni-58

MAT 2825 Kerma non-elastic (all but mt2) 28-Ni-58
 Cross Section -99.97 To 9999. %



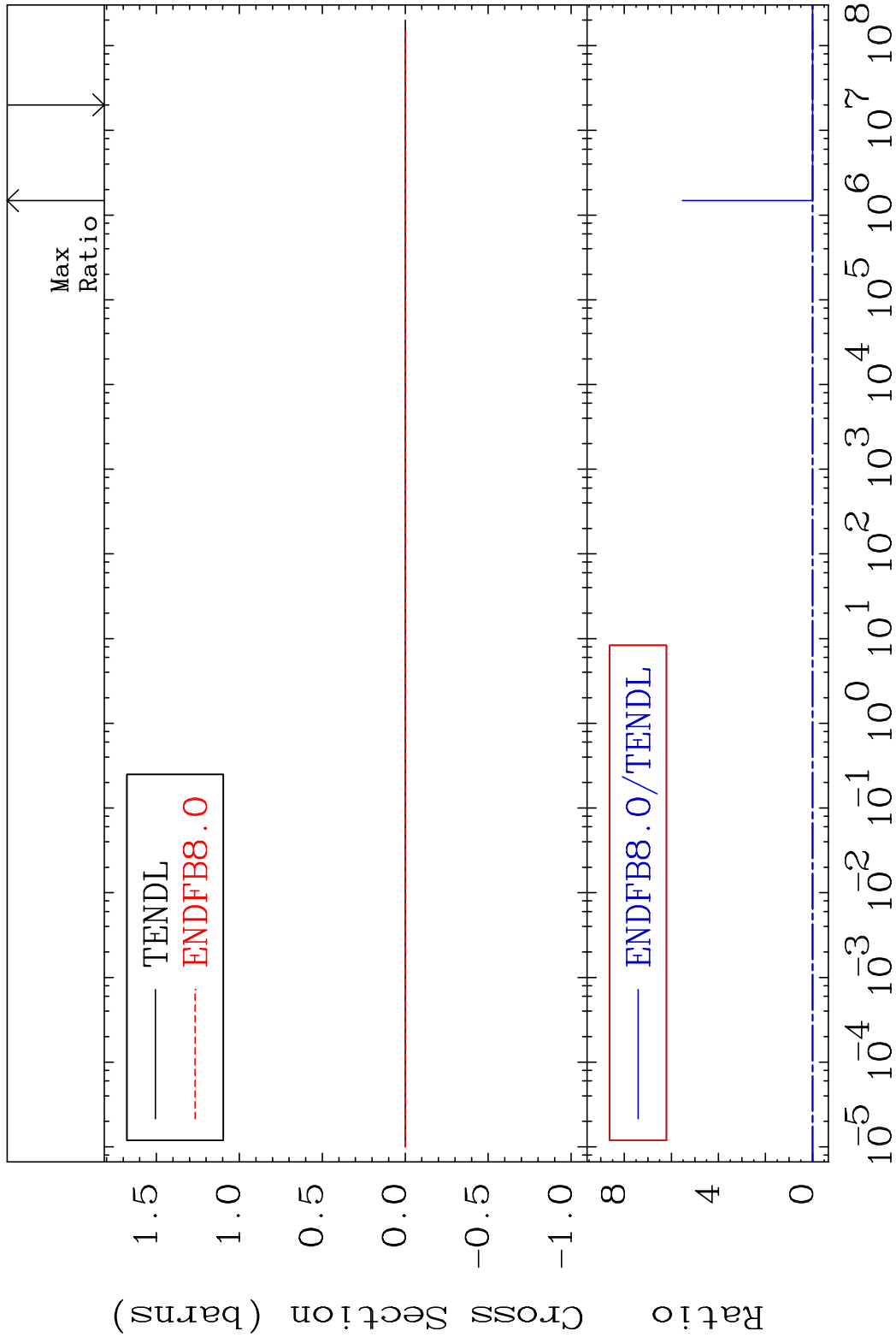
40 Incident Energy (eV) 28-Ni-58

MAT 2825 Kerma inelastic (mt51-91) 28-Ni-58
 Cross Section -100.0 To 9999. %



41 Incident Energy (eV) 28-Ni-58

MAT 2825 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-58
 Cross Section -100.0 To 9999. %

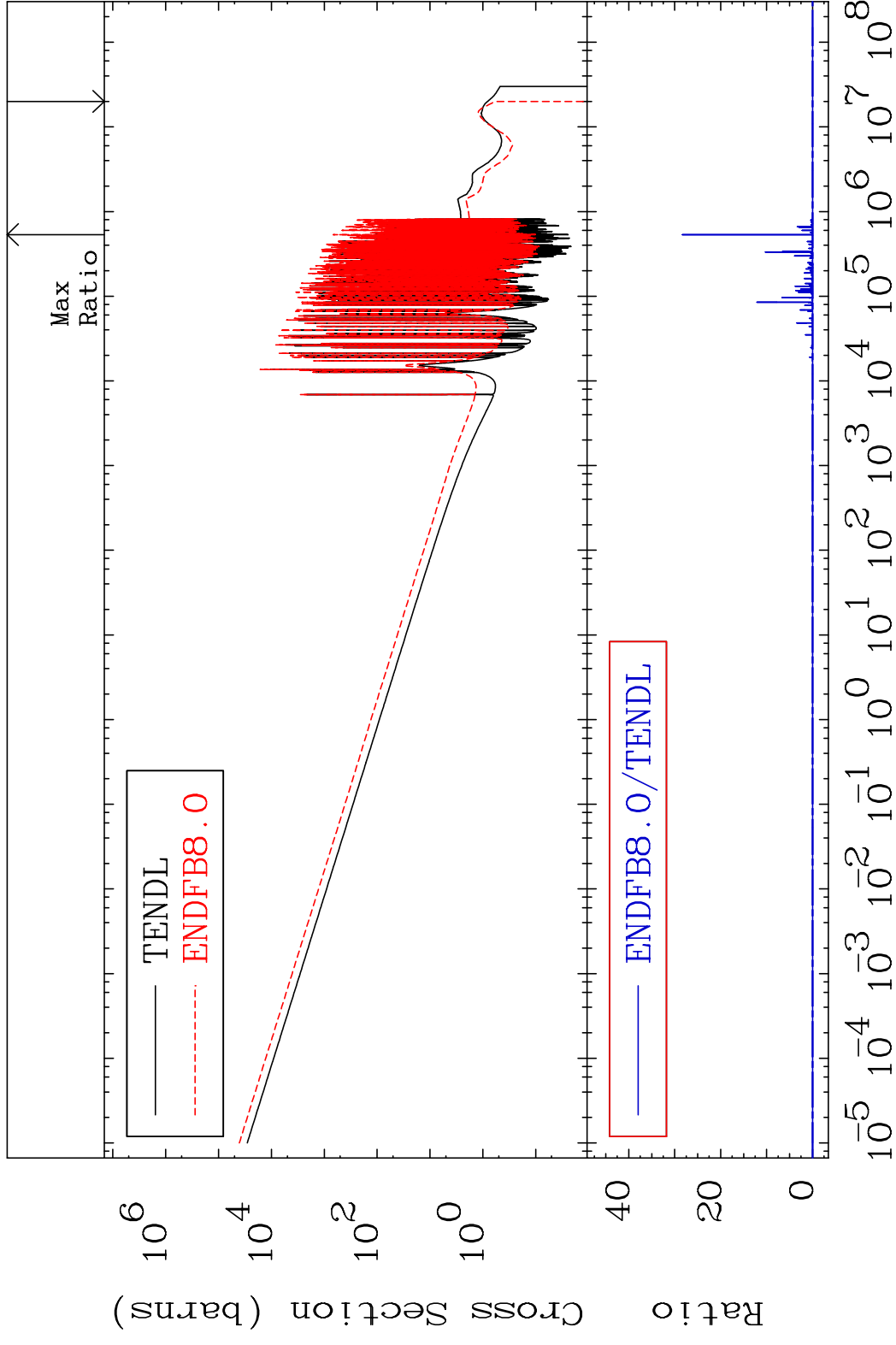


42

Incident Energy (eV)

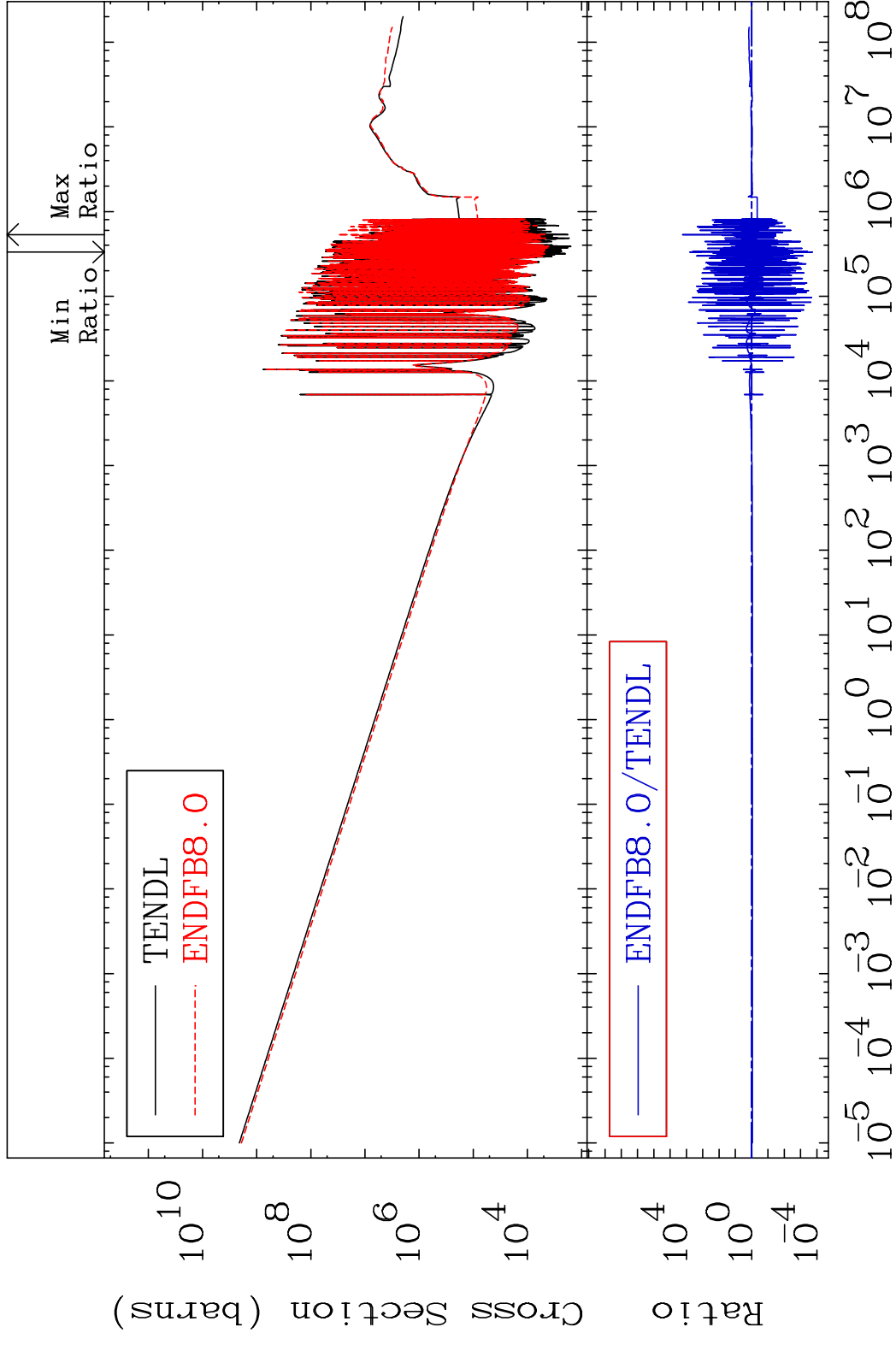
28-Ni-58

MAT 2825 Kerma capture (mt102) 28-Ni-58
 Cross Section -100.0 To 9999. %



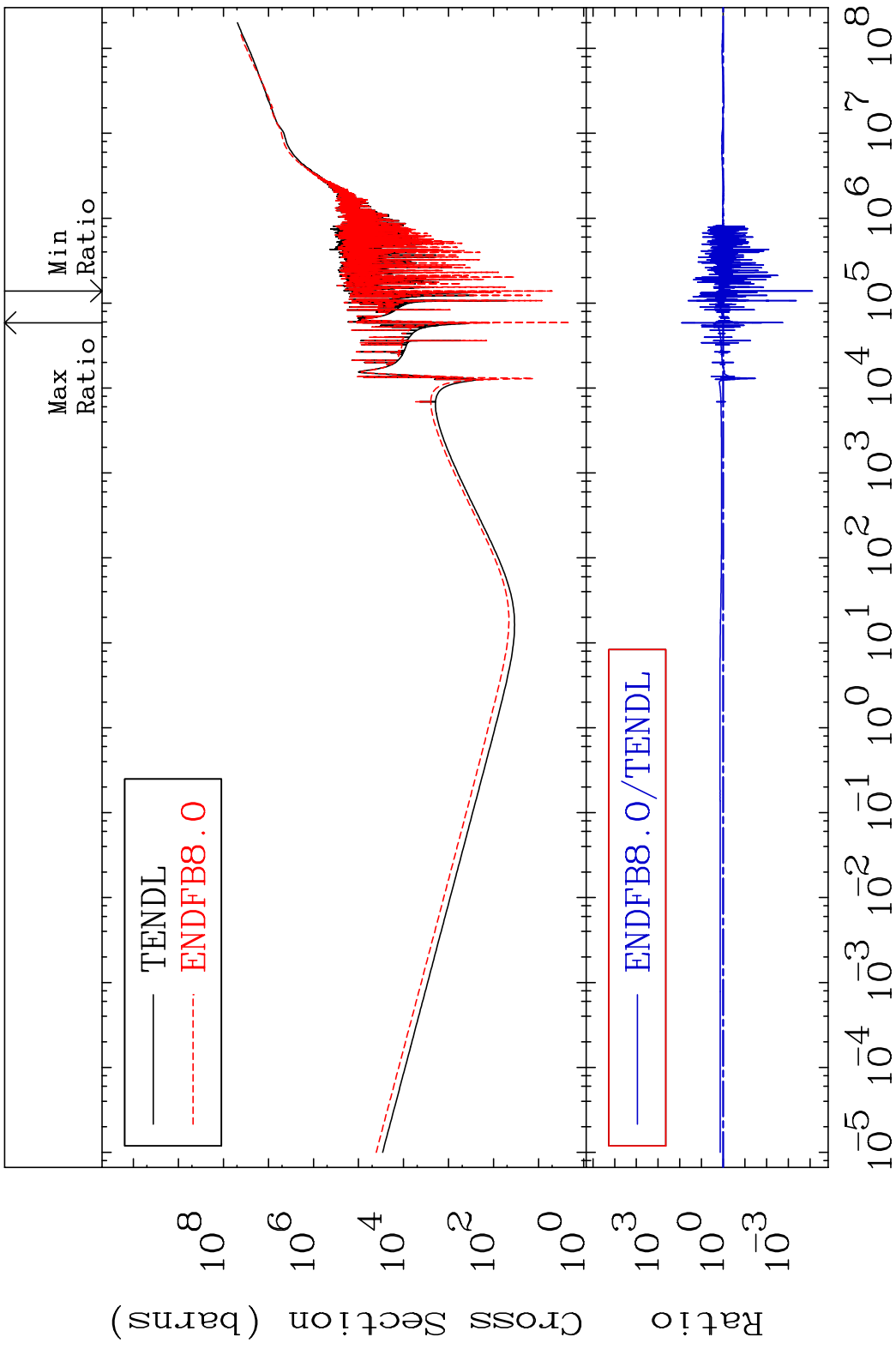
43 Incident Energy (eV) 28-Ni-58

MAT 2825 Total photon (eV-barns) 28-Ni-58
 Cross Section -99.98 To 9999. %

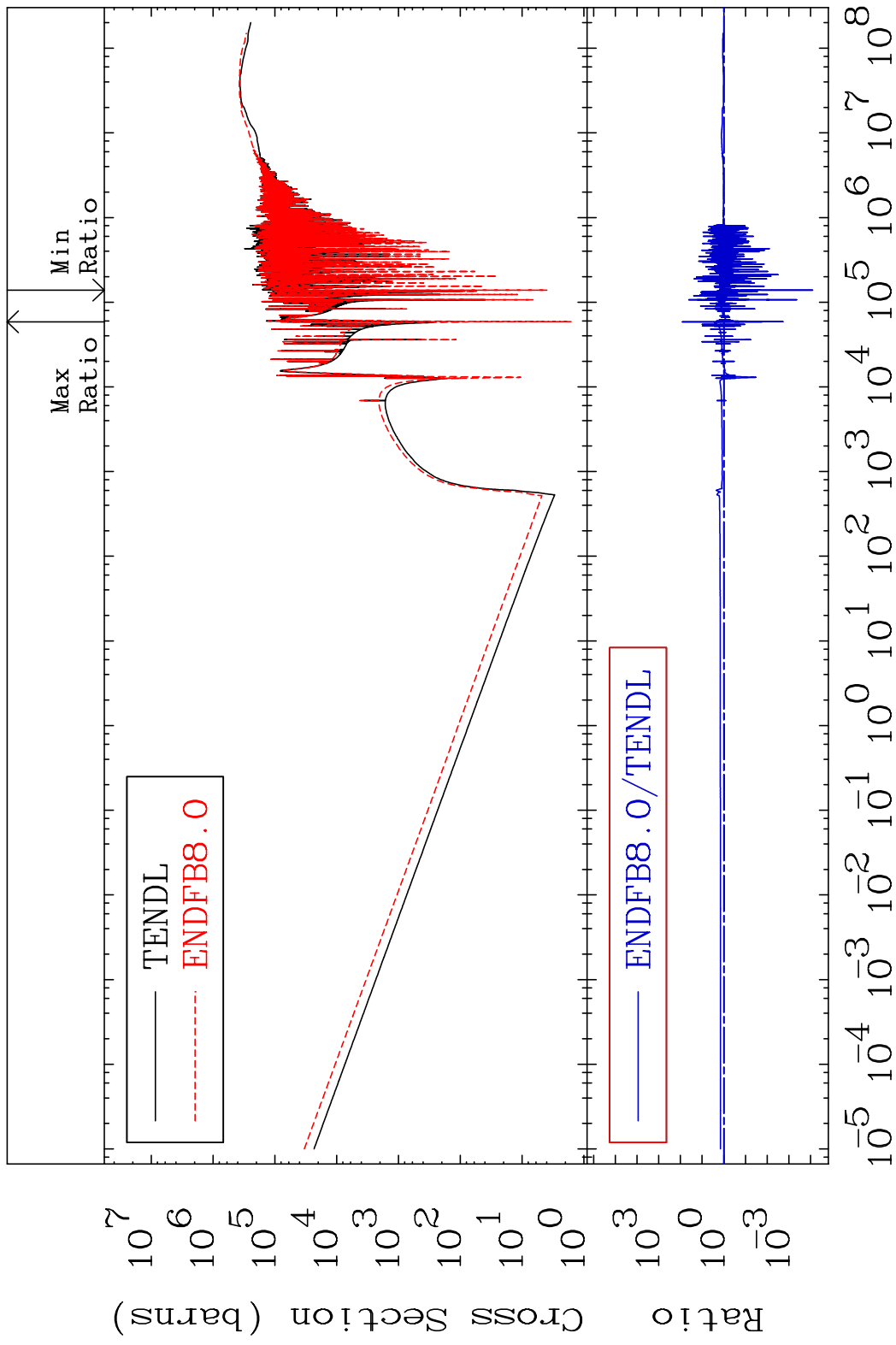


44 Incident Energy (eV) 28-Ni-58

MAT 2825 Total kinematic kerma (high limit) 28-Ni-58
Cross Section -99.99 To 8029. %



MAT 2825 Dpa total (eV-barns) 28-Ni-58
 Cross Section -99.99 To 8046. %



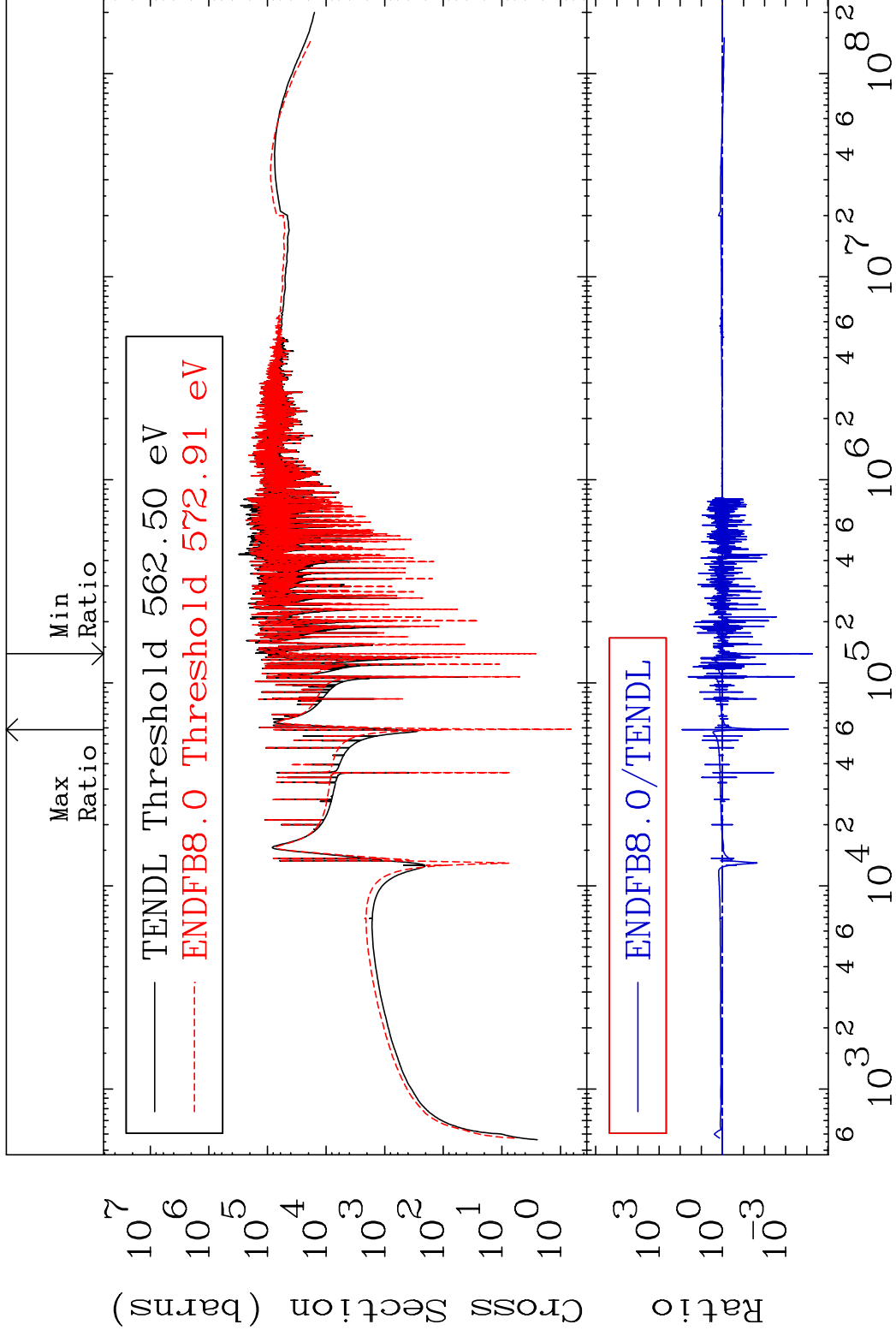
46 Incident Energy (eV) 28-Ni-58

MAT 2825

Dpa elastic (mt2)

28-Ni-58

Cross Section -99.99 To 7934. %

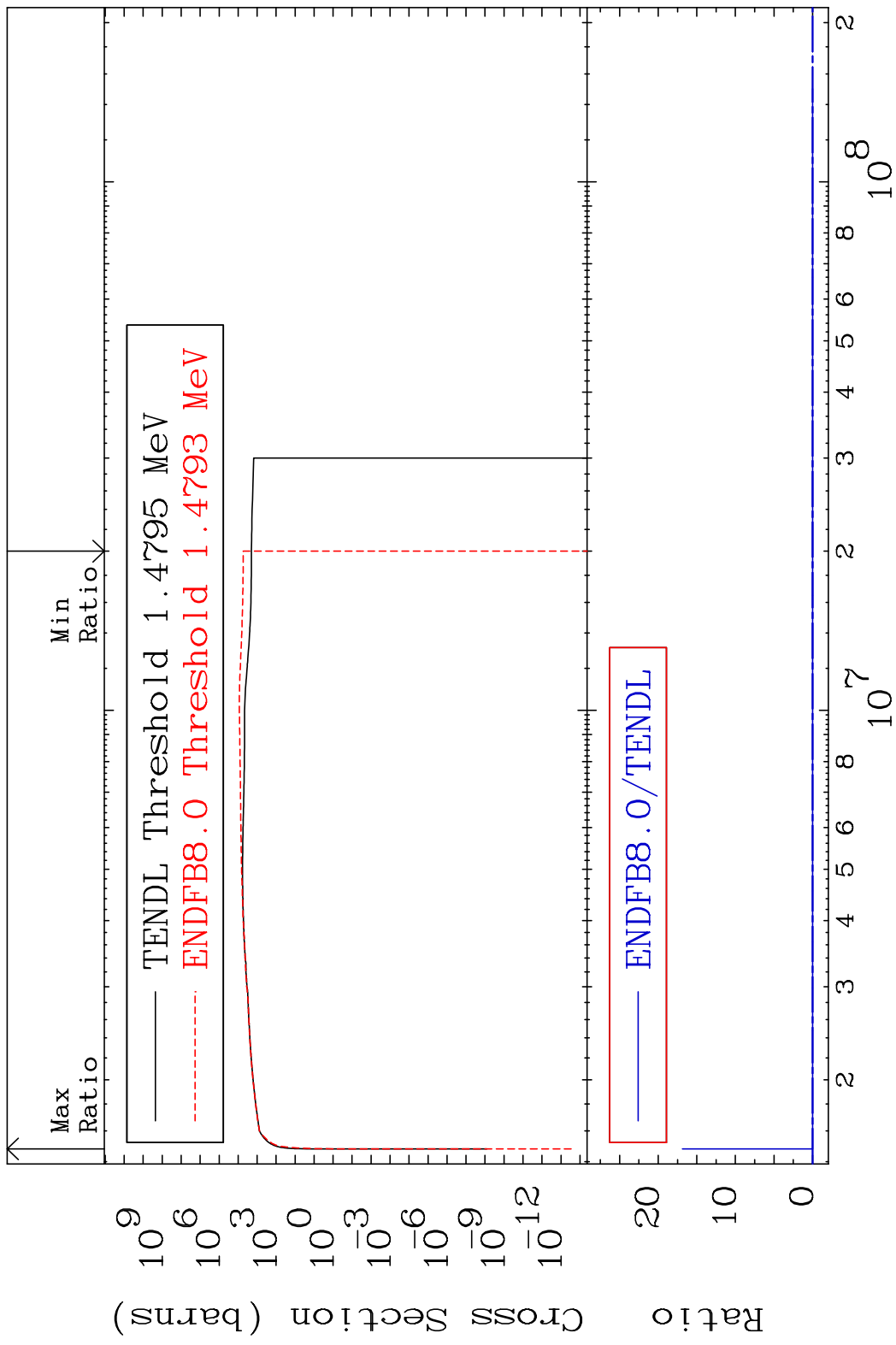


47

Incident Energy (eV)

28-Ni-58

MAT 2825 Dpa inelastic (mt51-91) 28-Ni-58
 Cross Section -100.0 To 9999. %



48 Incident Energy (eV) 28-Ni-58

MAT 2825 Dpa disappearance (mt102 -120) 28-Ni-58
Cross Section -100.0 To 9999. %

